

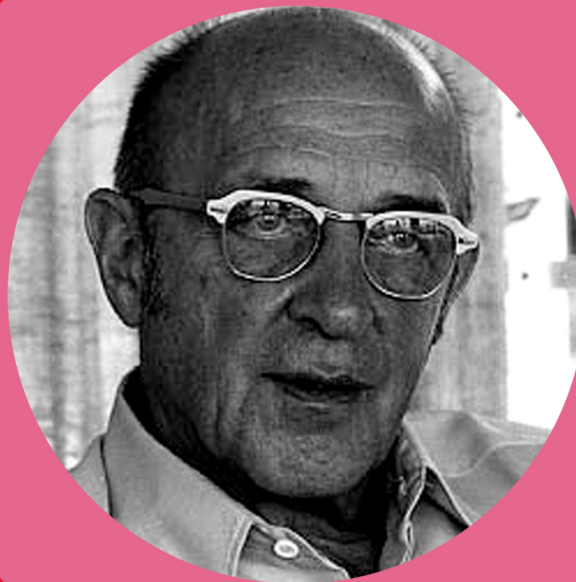
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The International Journal of
INDIAN PSYCHOLOGY



Person of the Month
Carl R. Rogers (1902-1987)

Editor in Chief:
Prof. Suresh M. Makvana, PhD
Editor:
Ankit P. Patel

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Chief Editor

Prof. Suresh M. Makvana, PhD

Editor

Ankit P. Patel

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Message from the Desk of Editor

It gives me great opportunity to present the forth volume of IJIP, the measure of progress. The concept of a Journal of Indian Psychology has been developing for over few years and finally another issue has come to fruition. From this edition we have ISSN for online 2348-5396 and print 2349-3429, ZDB-No.: 2775190-9, IDN: 1052425984, CODEN: IJIPD3, OCLC: 882110133, WorldCat Accession: (DE-600) ZDB2775190-9, ResearchID: P-8455-2015 in our publication. RedShine Publication, Inc is grateful to the contributors for making this Journal a reality.

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The Journal would publish peer-reviewed original research papers, case reports, systematic reviews and meta-analysis. Editorial, Guest Editorial, Viewpoint and letter to the editor are solicited by the editorial board. Large numbers of research papers were received from all over the globe for publication and we thank each one of the authors personally for soliciting the journal. We also extend our heartfelt thanks to the reviewers and members of the editorial board who so carefully perused the papers and carried out justified evaluation. Based on their evaluation, we could accept some research papers for this issue across the disciplines. We are certain that these papers will provide qualitative information and thoughtful ideas to our accomplished readers. We thank all the readers profusely who conveyed their appreciation on the quality and content of the journal and expressed their best wishes for future issues. We convey our deep gratitude to the Editorial Board, Advisory Board and all office bearers who have made possible the publication of this journal in the planned time frame.

We humbly invite all the authors and their professional colleagues to submit their research papers for consideration for publication in our upcoming issues as per the “Scope and Guidelines to Authors” given at the website. Any comments and observations for the improvement of the journal are most welcome.

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Person of the Month: Carl R. Rogers (1902-1987)

Ankit Patel¹

Born	January 8, 1902 Oak Park, Illinois, U.S.
Died	February 4, 1987 San Diego, California, U.S.
Citizenship	American
Known for	Client-centered therapy, Student-centered learning, Rogerian argument
Fields	Phenomenal field, Theoretical works



Carl Ransom Rogers was an American psychologist and among the founders of the humanistic approach in psychology. The person-centered approach, his own unique approach to understanding personality and human relationships. Throughout his career he dedicated himself to humanistic psychology and is well known for his theory of personality development. He began developing his humanistic concept while working with abused children. Rogers attempted to change the world of psychotherapy when he boldly claimed that psychoanalytic, experimental, and behavioral therapists were preventing their clients from ever reaching self-realization and self-growth due to their authoritative analysis. He argued that therapists should allow patients to discover the solution for themselves. Rogers received wide acclaim for his theory and was awarded various high honors.

Dr. Carl R. Rogers was born in Oak Park, Illinois, in 1902. He received his B.A. from the University of Wisconsin in 1924, a M.A. from Columbia University in 1928, and his Ph.D. in psychotherapy from Columbia University in 1931. In 1940 Rogers became professor of psychology at Ohio State University where he stayed until 1945. He then transferred to the University of Chicago in 1945 where he served as the professor of psychology and the executive secretary at the Counseling Center. In 1957 he took a joint position in the departments of

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Person of the Month: Carl R. Rogers (1902-1987)

psychology and psychiatry at the University of Wisconsin. After this Rogers traveled to a variety of colleges.

Rogers is a leading figure within psychotherapy and developed a breaking theory of personality development. This theory developed as a result of Rogers frustration with the authoritative analysis that therapists were imposing upon their patients. He is well known for his emphasis on personal awareness and allowing clients to have increasing flexibility in determining the treatment. Rogers believed that it was important for the individual to learn to understand himself and make independent choices that are significant in understanding the problem.

ROGERS' THEORY

Theory of Personality Development Rogers' therapy was an extension of his theory of personality development and was known as client-centered therapy, since the basis of the therapy was designed around the client. According to Rogers each person has within them the inherent tendency to continue to grow and develop. As a result of this the individual's self-esteem and self-actualization is continually influenced. This development can only be achieved through what Rogers refers to as "unconditional positive regard."

The element of free expression can also be illustrated in the case Mrs. L, and her ten- year- old son, Jim. During the first hour of the session the mother spent a full half-hour telling with intense feeling example after example of Jim's bad behavior. She tells of arguments with his sister, his refusal to dress himself, annoying tendencies such as humming at the table, bad behavior in school, and his refusal to help at home. Each one of her comments is highly critical of her son. Throughout the mothers talking the counselor makes no attempt to persuade the mother in feeling any other way about her son. Next, the son engages in play -therapy in which Jim makes a clay image and identifies it as his father. There is a great deal of dramatic play in which the boy shows his struggle in getting his father out of bed and the fathers resistance. Throughout this Jim knocks the clay figurines head off and crushes the body while shouting frantically. In both occurrences with the mother and her son the counselor allows the feelings to flow and does not try to block or alter them.

Another aspect of the therapy is that of positive action. Here once insight is achieved the actions that are taken are suited to the new insight that is gained. Thus, once Mrs. L has achieved a better emotional understanding of the relationship between herself and her son she is able to transfer that insight into actions which show the depth of her insight. She plans on giving Jim special affection, helping him to be more mature, and avoiding making the younger sister jealous. If such behavior had been suggested to her after the diagnosis of the case, she would have either rejected the suggestion or carried it out in a way that would almost certainly fail. Since it grew out of her own insight, she will be able to become a successful, mature mother.

Person of the Month: Carl R. Rogers (1902-1987)

The methodology of Rogers theory proved to be very successful within the case of Mrs. L and her son. This approach has helped millions of people since Rogers first developed it.

TIMELINE

1902 Born in Oak Park, Ill.
1924 Completed B.A., University of Wisconsin
1928 M.A., Columbia University
1931 Ph.D., Columbia University, Psychotherapy
1940 Ohio State University, Columbus, professor of psychology
1944 President of the American Association for Applied Psychology
1945 University of Chicago, Chicago, Ill., Professor of Psychology and executive secretary ,
Counseling Center.
1946 President of the American Psychological Association
1955 Nicholas Murray Butler Silver Medal
1956 First President of American Academy of Psychotherapist and special contribution award,
American Psychological Association
1957 professor in departments of psychology and psychiatry; University of Wisconsin
1960 member of executive committee, University of Wisconsin
1962 Fellow, Center for Advanced Study in the Behavioral Sciences
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1968 honorary doctorate, Gonzaga University
1971 D.H.L. , University of Santa Clara
1972 distinguished professional psychologist award, Division of Psychotherapy
1974 D.Sc. university of Cincinnati
1975 D.Ph. University of Hamburg and D.S.Sc. University of Leiden
1978 D.Sc. Northwestern University
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1987 Died of heart attack, San Diego, California

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Study of Somatic Complaints among Children with Poor Academic Performance

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Dr. Sandeep Patil⁵, Dr. Nitin Pattanashetty⁶, Dr. Mallikarjun A. Pattanashetti⁷

ABSTRACT

Objectives: 1. To study the nature and prevalence of somatic complaints among children with poor academic performance., 2. To study the associated Psychiatric problems among children with poor academic performance were presenting with somatic complaints. **Material and Methods:** Total of 1480 children studying in 3 CBSE schools, aged between 6 and 12 years were screened. 312 children were found to be performing poor in academics. After simple randomization and further screening procedure 115 children were included in the study. Each child was assessed by interviewing with MINI-KID Questionnaire and CBCL. Statistical analysis was done using Epi Info 7 software. **Results:** The prevalence of poor academic performers was found to be 21.08%. The prevalence of somatic complaints among children with poor academic performance was found to be 29.57%. Majority of poor academic performers have single somatic complaints accounts to be 21.74% and multiple somatic complaints accounts to be 7.83%. Prevalence of types somatic complaints like head ache, abdominal pain / discomfort and other complaints among poor academic performers were 20.87%, 11.30% and 9.57% respectively. **Conclusion:** Somatic complaints in school going children leads to poor performance in academics and school drop outs. Prevalence of somatic complaints were more in boys. Headache is the most common type of somatic complaint presented by the children.

Keywords: *Somatic Complaints, Poor Academic Performance.*

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Study of Somatic Complaints among Children with Poor Academic Performance

Education has a major influence on the life of any child. But for children with disabilities, the quality of schooling they receive is likely to have an even greater and longer lasting impact. Though education during childhood is a decisive component of human development, not every child thrives in it.

Globally it was noted that around 20% of school going children perform poor in their academics. Several Indian school surveys in the past decade have recorded prevalence rates of poor academic performance that range between 20 and 50%. In general it is estimated that one in every five school going children aged between 6-14 years in India is scholastically backward, making it as one of the important reasons for school dropouts. Somatic complaints by children is also a factor for poor academic performance in them and associated psychiatric problems along with somatic complaints. There is paucity of epidemiological studies in India to determine the exact prevalence of somatic complaints among children with scholastic backwardness.

Somatic complaints in school going children are more common and more often. Headache and abdominal pain or discomfort are common somatic complaints.⁷ Studies showed that children with somatic complaints have underlying psychiatry problems like anxiety and depression.

Somatic complaints can result in school absenteeism, problematic social interaction and poor academic achievement. For children and adolescents with frequent headache, co-morbid psychiatry problems are a well-recognized, but poorly understood clinical phenomenon.

A study conducted by Ann P, recruited 47 healthy children (age group between 6 to 17 years) presenting with migraine and 30 children as matched control group. They were assessed with Child's Symptom Inventory 4th edition and confirmatory psychological interview. Majority of the psychiatry co-morbidity with migraine headache were ODD 9 followed by anxiety 7, ADHD 6, conduct disorder 2, Dysthymia 1, and depression 1 respectively.

Another study conducted by John V et al, Showed that 79% of RAP (Recurrent Abdominal Pain) children were having anxiety disorder and 43% of RAP children were having depressive disorder. It also reports that RAP children were having higher levels of anxiety, depressive symptoms, temperamental harm avoidance, and functional impairment than control children.

There is limited literature available on this topic, hence there is need to study the prevalence and nature of somatic complaints among these children. The present study is intended to identify and analyze the somatic complaints and associated psychiatric problems among children with poor academic performance. Early identification and timely intervention can result in better outcomes amongst these children.

METHODOLOGY

Children studying in CBSE school, age group of 6 to 12 years scoring C grade and below were identified with the help of children school progress cards. As per simple randomization procedure done on students with C grade and below, every alternate child starting from first student in the list was recruited into the study. Detailed history was obtained from parents and teachers. Each recruited child was subjected for visual and hearing tests to rule out visual and hearing impairments. Then these children were subjected to physical examination to rule out major medical problems. These children were also subjected to I.Q testing to rule out intellectual disability by using Reven's Coloured Progressive Matrices. Following screening, each child subjected to MINI-KID Questionnaire and Childhood Behavioral Check List (CBCL) , by using CBCL somatic complaints were assessed. NIMHANS Index for Specific Learning Disorders. Temperament of children was assessed by Temperament Assessment Scale. The final diagnosis was made using ICD 10 DCR criteria Statistically analysis done using WHO Epi Info 7 software.

Inclusion criteria:

Students aged between 6 and 12 years from CBSE schools, both genders. Students scoring Grade 'C' and below in final examination

Exclusion criteria:

Students with visual, hearing impairment and other physical disabilities. Students suffering from acute and preexisting chronic medical disorders. Students whose Intelligence Quotient (IQ) is below 70.

RESULTS

Following the completion of the study 115 children met the criteria. Out of them 34 children were presenting with somatic complaints (i.e The prevalence of somatic complaints among children with poor academic performance was 29.57%).

Prevalence of single somatic complaint and multiple somatic complaints among children with poor academic performance was found to be 21.74% and 7.83% respectively. (Table no 1)

Prevalence of types somatic complaints like head ache, abdominal pain / discomfort and other complaints (eye pain, burning sensation of head, toothache, weakness and limb pain) among poor academic performers were 20.87%, 11.30% and 9.57% respectively. (Table no 2)

30 (88.24%) of children with poor academic performance, presenting with somatic complaints had underlying psychiatry problems. Significant P value noted (0.00). (Table no 3)

Majority of children presenting with somatic complaints 16 (47.06%) had emotional disorders. Followed by 5 (14.71%) conduct disorders, 5 (14.71%) borderline intellectual disabilities, 3 (8.82%) mood disorder (only depression), 3 (8.82%) sleep disorder, 2 (5.88%) specific learning

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disorder, 2 (5.88%) substance abuse disorder and 1 (2.94%) hyperkinetic disorder respectively. (Table no 4)

DISCUSSION

This study began by including 1480 students attending 3 CBSE schools of Belagavi City with age group ranging between 6-12 years. With the help of progress sheets of school children, it was found that 312 (21.08%) children were poor performers in academics i.e. children scoring grade C and below.

Following simple randomization and total number of children completed the study were 115. Among 115 children 34 (29.57%) were presenting with somatic complaints.

30 (88.24%) of children with poor academic performance, presenting with somatic complaints had underlying psychiatry problems. Significant P value noted (0.00).

Majority of children presenting with somatic complaints 16 (47.06%) had emotional disorders. Followed by 5 (14.71%) conduct disorders, 5 (14.71%) borderline intellectual disabilities, 3 (8.82%) mood disorder (only depression), 3 (8.82%) sleep disorder, 2 (5.88%) specific learning disorder, 2 (5.88%) substance abuse disorder and 1 (2.94%) hyperkinetic disorder respectively.

A study conducted in school children by Ann P showed that Majority of the psychiatry co-morbidity with migraine headache were ODD 20% followed by anxiety 15.55%, ADHD 13.33%, conduct disorder 4.44%, Dysthymia 2.12% , and depression 2.12% respectively.

Another study conducted by John V et al, showed that 79% of RAP children were having anxiety disorder and 43% of RAP children were having depressive disorder.

Most of the time children with psychiatry illness present with somatic complaints rather verbalize their problems. In turn leading to repeated consultation with pediatrician, where no obvious organic cause has been found. Increased secondary gains and temper tantrums were also noted. Absentees to school, poor performance in academics and may also leads to school dropouts. Our study results are on par with other study results as above mentioned.

CONCLUSIONS

The prevalence of somatic complaints in children with poor academic performance was 29.57%. 88.24% was the prevalence of psychiatry problems among children with poor academic performance, presenting with somatic complaints. Majority of children were suffering from emotional disorder as underlying disorder to somatic complaints i.e 47.06%. Somatic presentation in children to be evaluated for underlying psychiatry illness and early intervention of psychiatrist can minimize the further consequences.

Most of our study results p value were significant and also corresponds with previous study results.

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Conflict of Interests

The author declared no conflict of interests.

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Table no 1: Prevalence of somatic complaints among children with poor academic performance. (N=115)

Variables		Total no of children	
Somatic complaints		N (%)	
Present	Single complaints	25 (21.74%)	34 (29.57%)
	Multiple complaints	09 (7.83%)	
Absent		81 (70.43%)	
Total		115 (100%)	

Table no 2: Distribution of children with poor academic performance according to the different types of somatic complaints

Variables	Total No Of Children
Somatic complaints	N (%)
1. Head ache	24 (20.87%)
2. Abdominal complaints	13 (11.30%)
3. Other Complaints	11 (09.57%)

Table no 3. Psychiatry problems among children with poor academic performance presenting with somatic complaints. (N=115)

Variables	Somatic complaints N (%)		Total number of children N (%)	χ^2	P
Psychiatry problems	Present (%)	Absent (%)			
Present	30 (88.24%)	33 (40.74%)	63 (54.78%)	19.93	0.00*
Absent	04 (11.76%)	48 (59.26%)	52 (45.22%)		
Total	34(100%)	81 (100%)	115 (100%)		

Table no 4: Prevalence of psychiatry problem among children with poor academic performance presenting with somatic complaints.

Psychiatry problem	Total number of children presenting with somatic complaints (%)	p
1. Emotional disorders	16 (47.06%)	0.000*
2. Specific learning disorders	2 (5.88%)	0.339
3. Mood disorders	3 (8.82%)	0.024*
4. Substance abuse	2 (5.88%)	0.085
5. Sleep disorder	3 (8.82%)	0.152
6. Conduct disorder	5 (14.71%)	0.023*
7. Hyperkinetic disorders	1 (2.94%)	0.671
8. Borderline intellectual disabilities	5 (14.71%)	0.765

P < 0.05 Statically significant

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Ethical Correlates of Environmental Consciousness among Members and Non-Members of Nature Club

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ABSTRACT

The need and relevance of the concerns for nature and a pro-environmental attitude and behaviour is at its peak in the present world. It has been long recognized that ecological balance and safety of nature is central to human existence on earth. Despite this understanding, human activities are deteriorating the earth. If this situation is allowed to continue, the earth will soon turn out to be a useless and lifeless planet, along with marking the very end of human existence. One way to tackle this crisis is to reduce and prevent human actions that pose threats to nature and environment. A sustainable change in such actions is achieved effectively only by bringing about a change in ethics, values and attitudes of people. Ethics refers to a code of conduct. Values held by people contribute to their ethics. Since values are acquired, it can be instilled into people through different means; also implying that they are changeable. The concept of environmental consciousness refers to specific psychological factors related to individual's propensity to engage in pro-environmental behaviors (Zelezny & Schultz, 2000:367). Environmental consciousness can also be addressed as the psychological dimension of pro-environmental behavior. **Objectives:** The purpose of the present study is to investigate the 'ethical correlates of environmental consciousness among members and non-members of nature club'. **Method:** (a) **Participants:** The study was conducted on 54 high school students from various schools in Ernakulam district, Kerala. Participants included both members (n=21) and non-members (n=33) of any kind of nature club. (b) **Materials:** The Ethical Values Assessment (EVA- Jensen & Padilla, 2004) and New Ecological Paradigm Scale- Revised (NEP Revised- Dunlap, R. E., & Van Liere, K., Mertig, A., & Jones, R. E., 2000). EVA measures 3 categories of ethics, namely: Ethics of Autonomy, Ethics of Community and Ethics of Divinity. NEP scale assesses ecological worldview along 5 dimensions, namely: Reality of Limits to Growth, Ant anthropocentrism, Fragility of Nature's Balance, Rejection of Exemptionalism and the Possibility of Eco-crisis. (c) **Analysis:** Analysis was done using 't- test' and 'correlation'. (d)

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Results: There is significant difference between members and non-members of nature club in the dimensions Ethics of community, Overall ethics, Overall ecological worldview and Awareness of the possibility of eco-crisis. Students with membership in nature clubs have higher Ethics of community, Overall ethics, Overall ecological worldview (significance at 5% level) and Awareness of the possibility of eco-crisis (significance at 1% level). Also, Overall ethics has a significant positive correlation with Overall ecological worldview. **Conclusion:** Membership in nature club is found to enhance better environmental consciousness and ethics. The study implies that making students part of nature clubs facilitate pro-environmental behavior and better ethics.

Keywords: *Ethics, Environmental consciousness, Nature club, Ethics of Community, Possibility of Eco-crisis, New Ecological Paradigm.*

Humans and nature are two inseparable entities. The bond between man and environment is so inextricably interwoven such that whatever happens to the environment is reflected on man's life, and whatsoever is man's action is sure to have impacts in the environment. This divine relationship has been recognized by almost all cultures and traditions, especially the Indian tradition and has been wonderfully documented in ancient Indian literatures like Vedas, Upanishads, Puranas etc (Renugadevi, 2012). The ancient Hindu tribes who dwelled in forests and on mountains did a major hand on preserving the biodiversity rich dense forest patches. According to the verses in Rig-Veda: "the sky is like father, the earth like mother and the space as their son. The universe consisting of the three is like a family and any kind of damage done to any one of the three throws the universe out of balance" (David, 1980). Another verse from Rig-Veda says "Thousands and Hundreds of years if you want to enjoy the fruits and happiness of life then take up systematic planting of trees." (Dwivedi & Tiwari, 1987). The Iso- Upanishad has verses holding for the importance of peaceful co-existence of all organisms. The Puranas equate planting trees to repentance from sins (Renugadevi, 2011). A number of verses from the Noble Qur'an and the Holy Bible allude to the importance of environment and environmental protection: "eat and drink from the provision of Allah, and do not commit abuse on the earth spreading corruption" (The Noble Qur'an, 2:60); "the Lord God took the man and put him in the garden to work it and keep it" (The Holy Bible- Genesis, 2:15). Despite these age-old recognitions of the inevitable human-nature relationships, people at present largely neglect and ruin this divine bond. The improper use of natural resources, uneconomical constructions, lethal pollutants etc poses serious threats to the exquisite décor of human-environment kinship. It is in this poignant context that there arises the need for exploring deeper into the idea of environmental consciousness; its relevance in bringing about pro-environmental behaviours and other factors tied to the concept.

According to the Environment Protection Act of 1986: "environment includes water, air and land, and the inter-relationship which exists among and between water, air and land, and human beings, other living creatures, plants, microorganisms and property"(as cited in Tiwari, 2009).

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The concept of environmental consciousness refers to specific psychological factors related to individual's propensity to engage in pro-environmental behaviors (Zelezny & Schultz, 2000). Environmental consciousness can also be addressed as the psychological dimension of pro-environmental behavior. Environmental consciousness has several dimensions, namely: affective, dispositional, cognitive and active. The affective dimension of environmental consciousness includes the values or general beliefs about human-environment relationship. This dimension has been explored much by Dunlap and van Liere. According to Dunlap et al (2000); these kinds of values and general beliefs about human-environment relationships largely influence pro-environmental behaviours. Dispositional dimension of environmental consciousness hold sense of responsibility and self-efficacy for actions in favour of the environment. Cognitive dimension of environmental consciousness is concerned with the knowledge regarding environmental problems. The cognitive dimension is imperative for triggering personal obligation for pro-environmental behaviours, values etc. The active dimension of environmental consciousness includes behaviours like taking part in nature clubs, adhering to eco-friendly lifestyle, recycling etc.

Environmental consciousness derives from many factors. 'Ethics' is one among the important factors that influence environmental consciousness. Ethics refer to the etiquettes of conduct. They are the moral principles that steer a person's behavior. Values held by people contribute to their ethics. According to Stern & Dietz (1994), attitudes of environmental concern are rooted in a person's value system; values placed on oneself, others, plants and animals (as cited in Schultz, 2000). The five paths leading to lasting profound affection to nature, identified by Swan (2000) are: becoming well-informed, serving a sense of social justice, concern for personal and public health, seeking personal health and fitness, and profound emotional or spiritual experiences (as cited in Swan, 2010). According to the Norm-Activation theory of Altruism by Schwartz (1972, 1977), pro-environmental behaviours result from moral norms held by the person and the activation of such moral norms requires the person's belief that his or her pro-environmental behaviours will prevent the threatening consequences of environmental problems. Stern, Dietz & Kalof (1993) identified self-interest, altruism towards other humans and altruism towards other species and biosphere as the main value orientations pertaining to environmentalism (as cited in Stern, Dietz, Abel, Guagnano & Kalof; 1999). "Egoistic values predispose people to protect aspects of the environment that affect them personally, or to oppose protection of the environment if the personal costs are perceived as high" (Stern & Dietz, 1994). According to Olli, Grendstad & Wolleback (2001), the only factor that enhances environmental behaviours is the social context. Study by Kortenkamp & Moore (2001) show that ecocentric and anthropocentric ethics are tied closely to pro-environmental actions. General pro-environmental behaviours are influenced by factors like value orientation, environmental beliefs and norms (cited in Nordlund & Garvill, 2002). General environmental concerns are predicted better by self-transcendence values (Schultz, Gouveia, Cameron, Tankha, Schmuck & Franek, 2005). Biocentric values with intrinsic worth of nature are found to be strongly linked to pro-

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environmental attitudes and dedication to environmental protection (Perkins & Brown, 2012). Studies show that altruistic values have stronger connections with pro-environmental actions (Dietz et al., 1998; Karp, 1996; Stern & Dietz, 1994; Stern, Dietz, Kalof & Guagnano, 1995). Related researches by Joireman, Lasane, Bennett, Richards and Solaimani; Van Vugt & Samuelson (1998) show that people with prosocial value orientations show greater environmental concerns than people with individualistic values (as cited in Stern, 2000). A study by Samarasinghe (2012) found that ethical values are positively correlated to pro-environmental attitudes.

All the existing studies imply the role of values, norms etc on environmental consciousness. These findings pave the way for the assumption that certain ethical values correlate with the concept of environmental consciousness.

The need and relevance of the concerns for nature and a pro-environmental attitude and behaviour is at its peak in the present world. It has been long recognized that ecological balance and safety of nature is central to human existence on earth. Despite this understanding, human activities are deteriorating the earth. If this situation is allowed to continue, the earth will soon turn out to be a useless and lifeless planet, along with marking the very end of human existence. One way to tackle this crisis is to reduce and prevent human actions that pose threats to nature and environment. A sustainable change in such actions is achieved effectively only by bringing about a change in ethics, values and attitudes of people.

Ethics are different from values in that they are moral values set by society or a larger group to be accepted and followed, whereas values are confined to the individual acquired on personal will. Since values are acquired, it can be instilled into people through different means; also implying that they are changeable. Identifying the ethical correlates of environmental consciousness aids better in formulating a code of ethic that presumably augment environmental concerns and pro-environmental behaviors.

The target group of the present study is high school students with and without membership in nature clubs. This facilitates affirming the idea that being part of pro-environmental groups adds to environmental consciousness. This specific target group is especially important because high school education is the period during which students start gaining a more rational understanding of ethics, values etc; and hence the actual ethical values contributing to their environmental concerns can be precisely deciphered and manipulated.

Objective

- The purpose of the present study is to investigate the ‘ethical correlates of environmental consciousness among members and non-members of nature club’.

METHOD

Participants

The study was conducted on 54 high school students from various schools in Ernakulam district, Kerala. Participants included both members (n=21) and non-members (n=33) of any kind of nature club.

Materials

The Ethical Values Assessment (EVA- Jensen & Padilla, 2004) and New Ecological Paradigm Scale- Revised (NEP Revised-Dunlap, R. E., & Van Liere, K., Mertig, A., & Jones, R. E., 2000). EVA measures 3 categories of ethics, namely: Ethics of Autonomy, Ethics of Community and Ethics of Divinity. NEP scale assesses ecological worldview along 5 dimensions, namely: Reality of Limits to Growth, Ant anthropocentrism, Fragility of Nature's Balance, Rejection of Exemptionalism and the Possibility of Eco-crisis. All the tests were locally standardized

Analysis

Analysis was done using 't- test' and 'correlation'.

RESULTS

Results are summarized in table 1.

Table 1. Mean scores, standard deviations and 't' values for the three categories of ethics, overall ethics, overall ecological worldview and five dimensions of ecological worldview obtained by participants with and without membership in nature clubs.

Dimensions	Group		t values
	With membership in nature club Mean \pm SD	Without membership in nature club Mean \pm SD	
Ethic of Autonomy	28.86 \pm 1.769	28.45 \pm 1.481	0.903
Ethic of Community	29 \pm 1.673	27.76 \pm 1.768	2.57*
Ethic of Divinity	29.05 \pm 1.746	28.33 \pm 1.915	1.382
Overall Ethics	86.90 \pm 4.312	84.55 \pm 3.841	2.098*
Reality of Limits to Growth	8.52 \pm 1.806	7.45 \pm 1.679	2.216*
Ant anthropocentrism	13.67 \pm 1.742	13.03 \pm 1.704	1.326
Fragility of Nature's Balance	11.76 \pm 2.427	11.79 \pm 2.190	-0.041
Rejection of Exemptionalism	10.14 \pm 2.128	10.97 \pm 1.794	-1.535
Possibility of Eco-crisis	13.10 \pm 1.814	11.33 \pm 2.380	2.895**
Overall Ecological Worldview	57.19 \pm 3.919	54.58 \pm 4.918	2.054*

*denotes significance at 5% level, **denotes significance at 1% level

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The results clearly indicate that there is significant difference between members and non-members of nature club in the dimensions Ethics of community, Overall ethics, Reality of Limits to Growth, Overall ecological worldview and Awareness of the possibility of eco-crisis. Students with membership in nature clubs have higher Ethics of community, Overall ethics, Overall ecological worldview (significance at 5% level) and Awareness of the possibility of eco-crisis (significance at 1% level). Also, Overall ethics has a significant positive correlation with Overall ecological worldview.

DISCUSSION

The overall results of the study indicate better environmental consciousness and ethics among members of nature clubs.

Being part of nature clubs promote pro-environmental attitudes and behaviours by making students engage in activities like planting trees, vegetable cultivation, cleaning of premises etc. This can be substantiated with the finding of Dunlap et al (2000); that the values and general beliefs about human-environment relationships largely influence pro-environmental behaviours. Students in such groups also get better informed about recycling things, moving to eco-friendly products, factors causing harm to the environment and the like. All these in turn shape the students thoughts and behaviours in such a way that is sensitive to the demands required to live in tune with the nature and environment. This is attained only by adhering to certain values and ethics. General pro-environmental behaviours are influenced by factors like value orientation, environmental beliefs and norms (cited in Nordlund and Garvill, 2002).

The ethics one holds influence one's attitudes towards environment. According to Stern and Dietz (1994), attitudes of environmental concern are rooted in a person's value system; values placed on oneself, others, plants and animals (as cited in Schultz, 2000). The five paths leading to lasting profound affection to nature, identified by Swan (2000) are: becoming well-informed, serving a sense of social justice, concern for personal and public health, seeking personal health and fitness, and profound emotional or spiritual experiences (as cited in Swan, 2010). Consistent with these findings are the results of this study indicating that, overall ethics has a significant positive correlation with overall ecological worldview; and also, Ethic of Community is better among members of nature club. The finding that members of nature club have better Ethic of Community is in line with the findings of Olli, Grendstad & Wolleback (2001), that; the only factor that enhances environmental behaviours is the social context. Ethic of Community encompasses community-oriented virtues, concern for others' physical and psychological well-being, harmony goals etc. Better Ethic of Community among members of nature clubs can be attributed to a shared sense of unity with other beings derived from the joint activities within the club; feeling of belongingness towards the plants and animals around etc. the findings of Stern, Dietz & Kalof (1993) that self-interest, altruism towards other humans and altruism towards other species and biosphere are the main value orientations pertaining to environmentalism (as

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cited in Stern, Dietz, Abel, Guagnano & Kalof; 1999); substantiate our assumptions. Studies also show that altruistic values have stronger connections with pro-environmental actions (Dietz et al., 1998; Karp, 1996; Stern & Dietz, 1994; Stern, Dietz, Kalof & Guagnano, 1995). Related researches by Joireman, Lasane, Bennett, Richards and Solaimani; Van Vugt & Samuelson (1998) show that people with prosocial value orientations show greater environmental concerns than people with individualistic values (as cited in Stern, 2000). Study by Kortenkamp and Moore (2001) show that ecocentric and anthropocentric ethics are tied closely to pro-environmental actions.

Members of nature clubs are also better aware of the 'Reality of Limits to Growth' and about the 'Possibility of Eco-crisis'. Being part of nature clubs, students are greatly exposed to awareness campaigns and nature protection consortiums which in turn expand their recognition of realities concerning nature and human existence; such as that of population explosion, limitations of natural resources, rampant pollutions, consequences of global warming and the like. Better the awareness, greater are the pupil's motivation to work for nature.

All such concerns are presumably tied to favourable ecological worldview and deep concern for nature. Based on the above findings it can be concluded that membership in nature club is found to enhance better environmental consciousness and ethics. Also, Ethics of Community is closely related to environmental consciousness. The study implies that making students part of nature clubs facilitate pro-environmental behavior and better ethics. The limitation of the study is that it was conducted on a small sample confined to Ernakulam district in Kerala and the participants were restricted to only high school students.

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Conflict of Interests

The author declared no conflict of interests.

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Management of Mathematics Anxiety through Behaviour Modification, Super brain Yoga and JPMR in Ninth Standard Student

Dr. Rajesh Ganesan¹, Pankaj Singh^{2*}

ABSTRACT

Mathematics Anxiety is an irrational fear of Mathematics. Mathematics Anxiety is defined as "the presence of a syndrome of emotional reactions to arithmetic and mathematics" (Dreger & Aiken, 1957, p.344). It creates a feeling of tension, apprehension, or fear that interferes with performance in Mathematics and also results in 'Mathematics-Avoidance'. Further, 'Mathematics-Avoidance' leads to less competency, exposure and practice of Mathematics, leaving students more anxious and mathematically, unprepared to achieve.

Math anxiety is a learned response that inhibits cognitive performance in the math classroom. It is widespread among students from elementary age through college. Students suffering from math anxiety have difficulty performing calculations and maintaining a positive outlook on mathematics. Math anxiety is the result of a cycle of math avoidance that begins with negative experiences regarding mathematics. These students avoid Mathematic courses and tend to feel negative towards Mathematics and this also affects student's overall confidence level.

However, Behaviour Modification techniques have proven instruments that can reduce various types of anxieties and Super Brain Yoga for improving integration of the brain.

This is a case study of a student of IX standard, Kendriya Vidyalaya, Who was referred by his Mathematics teacher and parent complaining that the student becomes anxious whenever he encounters Mathematic problems.

After taking Math autobiography it was revealed that the anxiety began due to harsh handling by father while teaching Mathematics. Students score in recent Mathematic exam was noted very low i.e 12/40. His Mathematics Anxiety was assessed by using Suri, Monroe and Koc's (2012)

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short Mathematics Anxiety Rating Scale. Student's hemispheric dominance of the brain was measured by using Taggart and Torrance's Human Information Processing Survey (1984). This student was treated with Behaviour Modification techniques and Super Brain Yoga for six weeks.

Interventions used are:

- (i) Reduction of Rate of Breathing (Ganesan, 2012).
- (ii) Jacobson Progressive Muscle Relaxation (Jacobson, 1938)
- (iii) Laughter Technique (Ganesan, 2008b).
- (iv) Development of Alternate Emotional Responses to the Threatening Stimulus (Ganesan, 2008a).
- (v) Super Brain Yoga (Sui, 2005).

The anxiety level and performance in Mathematics exam was reassessed after six weeks. Results showed that Mathematics Anxiety was significantly reduced (60 to 20, 40%) and he performed better in the Mathematics exam (12/40 to 24/40, 30%). After reassessing student on Human Information Processing Survey by Taggart and Torrance (1984), it was found that student's dominant information processing mode was 'Integrated' and this shows that Behaviour Modification techniques and Super Brain Yoga are efficient in treating Mathematics Anxiety.

Keywords: *Mathematics Anxiety, Behaviour Modification, Super Brain Yoga.*

Behaviour Modification involves systematic application of learning principles and techniques to assess and improve individual's overt and covert behaviours in order to enhance their daily functioning. Simple or specific anxieties have been quite effectively treated with behavior modification techniques. The behaviorists involved in classical conditioning techniques believe that the response of phobic fear is a reflex acquired to non-dangerous stimuli. The normal fear to a dangerous stimulus, such as a poisonous snake, has unfortunately been generalized over to non-poisonous ones as well.

If the person were to be exposed to the non-dangerous stimulus time after time without any harm being experienced, the phobic response would gradually extinguish itself. Also, this assumes that the person does not also experience the dangerous stimulus during that same extended period of time. In other words, one would have to come across only non-poisonous snakes for a prolonged period of time for such extinction to occur. This is not likely to occur naturally, so behavior therapy sets up phobic treatment involving exposure to the phobic stimulus in a safe and controlled setting.

John B Watson an American psychologist, who coined the term behaviorism, emphasized that habits are learned due to classical conditioning and also demonstrated it in a classical experiment (Watson & Rayner, 1920). Behaviour Modification is based on the learning theories and its basic

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principle is that when we consistently respond to a stimulus in a particular manner neural network forms and it becomes habit. Habits can be learned and unlearned through Behaviour Modification. Further, in 1950s Joseph Wolpe research work based on Pavlovian conditioning and Sherrington (1947) observation led to inception of Reciprocal Inhibition.

He extended the principal of reciprocal inhibition to state that if a response that is incompatible with the learned fear or anxiety can be made to occur to a stimulus that had been conditioned to produce that fear, then that stimulus will cease to elicit the fear reaction. Based on Sherrington (1947) observation that if one group of muscles is stimulated, an antagonistic muscle group will be inhibited, and vice versa, Joseph Wolpe propounded treatment for anxieties and irrational fears.

Anxiety is an unadaptive habit which is formed due to wrong learning and can be treated by relearning the behaviour to form adaptive habits. Similarly Mathematics-Anxiety is treated with Behaviour Modification by relearning and creating alternate responses to the threatening stimulus. Alternate responses are created on the principle of Reciprocal Inhibition where an incompatible response is produced to counter the negative stimulus. Mathematics which has become a threatening stimulus due to various reasons can be de-conditioned by practicing techniques based on reciprocal inhibition.

In Eastern medicine the outer portion of the ear is viewed as a micro-system representing the entire body. According to Dr. Paul Nogier MD, a neurologist, the ear corresponds to an inverted fetus curled in the womb. Points on the ear correspond with specific areas of the body, and the ear lobe corresponds to the head. Consequently, massage of these points can produce therapeutic benefits to the brain. The practice of ear piercing too has its real reasons being the stimulation of the pituitary and pineal glands, due to the effect of the pressure in the ear lobes. Based on this concept Super Brain Yoga was developed by Master Chou Kok Sui which activates our pineal and pituitary gland (Sui, 2005).

Super Brain Yoga is a technique which enhances Alpha waves in the brain and Synchronization of left and right brain hemispheres (Sui, 2005). Increase in Alpha waves in the brain indicates that the body has become relaxed and thus Super Brain Yoga is an effective tool to reduce anxiety. Super Brain Yoga also synchronizes left and right brain hemispheres and integrates the brain. Students having integrated brain are efficient in solving Mathematical problems by using resources of both left and right hemisphere (Oliver, 2009). Thus practicing Super Brain Yoga every day helps to alleviate Mathematical Anxiety and also increases scholastic performance of the students in Mathematics exam by enhancing the integration of the brain.

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Dr. Jacobson studied the relationship between muscular tension and various disorders of the body along with psyche and has stated that '*mental calmness is a result of physical relaxation*' and '*an anxious mind can't exist in a relaxed body*'. **Stress and anxiety is strongly associated with muscle tension.** Tension held in muscles adds physical discomfort or pain which commonly shows up as a headache, backache, stomachache, or pain neck etc. Progressive Muscle Relaxation of Dr Edmund Jacobson is a systematic technique for achieving a deep state of relaxation. Muscle could be relaxed by first tensing it for a few seconds and then releasing it. Muscular tension is usually followed as a by-product of anxiety, hence, one can lower and reduce anxiety by understanding and learning how to self relax those muscular tension. (McCallie et al., 2006).

Thus Jacobson Progressive Muscle Relaxation helps to reduce specific anxieties like Mathematics-Anxiety. Ganesan (2008, 2012) had studied the efficacy of the above Behaviour Modification techniques and found them effective in reduction of neurotic disorders like Anxieties. Combination of these techniques including Super Brain Yoga can play a significant role in the management of anxiety related to Mathematics. Hence there is a need for systematic evaluation of the efficacy of above mentioned techniques in the Management of Mathematics-Anxiety. This study has been undertaken in this direction with a view to implement these effective techniques.

METHODOLOGY

This is a case study of a student of IX standard, Kendriya Vidyalaya, Who was referred by his Mathematics teacher and parent complaining that the student becomes anxious whenever he encounters Mathematic problems. After taking Math autobiography it was revealed that the anxiety began due to harsh handling by father while teaching Mathematics. Students score in recent Mathematic exam was noted very low i.e 12/40. His Mathematics Anxiety was assessed by using Suri, Monroe and Koc's (2012) short Mathematics Anxiety Rating Scale. Student's hemispheric dominance of the brain was measured by using Taggart and Torrance's Human Information Processing Survey (1984). This student was treated with Behaviour Modification techniques and Super Brain Yoga for six weeks.

Interventions:

The following interventions were given for six weeks i) Reduction of Rate of Breathing (Ganesan, 2012) ii) Development of Alternate Emotional Responses to Threatening Stimulus (Ganesan, 2008a) iii) Laughter Technique (Ganesan, 2008b) iv) Super Brain Yoga (Sui, 2005) v) Jacobson Progressive Muscle Relaxation (Jacobson, 1938).

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They were used to create reciprocal inhibition in the Math anxious student and enhanced integration of the brain. Student had relearned the new behaviour to form adaptive habit towards the Mathematics subject.

RESULTS

The student was reassessed after six weeks. Results showed that Mathematics Anxiety was reduced significantly (40%) from 60 to 20, on short Mathematics Anxiety Rating Scale (sMARS) [Table 1].

Table 1: Mathematics Anxiety Score Before And After Intervention

Score Range (0-100)	Before	After six weeks	Reduction
	60	20	40%

Whereas student's academic performance in Mathematics was improved significantly (30%) from 12/40 to 24/40 [Table 2].

Table 2: Academic Performance In Mathematics Before And After Intervention.

Score Maximum-40	Before	After six weeks	Gain
	12	24	12 (30%)

Student was assessed on Tagarat and Torrance's Human Information Processing Survey (1984). Results showed that before intervention, the dominant mode of information processing was 'Left' with a score of 17, where Right Hemisphere and Integrated score were 15, 8 respectively. On reassessing the student after intervention, the dominant mode of processing found to be 'Integrated' with a comparatively higher score of 18, whereas Left Hemisphere and Right Hemisphere score were 10 and 12 respectively [Table 3].

Table 3: Human Information Processing Survey.

	Left Hemisphere	Right Hemisphere	Integrated
Before	17	15	8
After	10	12	18

DISCUSSION

The purpose of the present study was to manage Mathematics Anxiety. For the objective assessment of Mathematics Anxiety, a psychometric scale, namely, short Mathematics Anxiety Rating Scale by Suri, Monroe and Koc (2012) was used and to find the dominant information processing mode of the student, Taggart and Torrance's Human Information Processing Survey (1984) was used. Behaviour Modification techniques and Super Brain Yoga were used to treat

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the student. Initially student's recent score in Mathematics exam was collected, which was low, 12/40.

Before giving interventions student was assessed for Mathematics Anxiety, where he score 60 and was assessed on Human Information Processing Survey.

Student's dominant mode of information processing was found to be 'Left', which implied that student's brain uses logic to perform in Mathematics. Student was given intervention for six weeks with Behaviour Modification techniques, like Reduction of Rate of Breathing, Jacobson Progressive Muscle Relaxation, Development of Alternate Emotional Responses to Threatening stimulus, Laughter Technique, and Super Brain Yoga.

Reduction of rate of breathing initiates slow breathing or diaphragmatic breathing. According to the University of Texas Counseling and Mental Health Center, "Diaphragmatic breathing allows one to take normal breaths while maximizing the amount of oxygen that goes into the bloodstream. It is a way of interrupting the 'Fight or Flight' response and triggering the body's normal relaxation response". Slow breathing makes the diaphragm to stimulate vagus nerve and it further activates parasympathetic nervous system which alleviates the effect of sympathetic nervous system. Activation of parasympathetic nervous system reduces the effect of anxiety and relaxes the body. So, rate of reduction of breathing produces response which is incompatible to Mathematics Anxiety.

Further, the muscle tension was relaxed by Jacobson Progressive muscle Relaxation technique. The idea behind progressive muscle relaxation is simply that of isolating one muscle group at a time, then intentionally creating muscle tension for 8-10 seconds, and then allowing the muscle to totally relax so as to release the tensions. When the body is aware of the presence of the tension, it will respond by triggering the muscles to relax, where the rest of the other components of the relaxation response will naturally follow. Lesser oxygen is needed for relaxed muscle and hence the rate of breathing is slow. Since the heart does not require to be beating so fast to supply oxygen out to tense muscles, heart rate and blood pressure decline. Thus the normal blood flow will return to the belly and digestion resumes where the belly is calmed and also the hands and feet are warmed up.

As a result, this series of body adaptations all occur and fall naturally into place as the voluntary muscles are being directed into a state of relaxation, and changes in mood followed which make the body feeling calm and refreshed. This state of relaxation is incompatible to anxiety and thus effective in managing Mathematics Anxiety?

Whereas, through Laughter Technique hormone called endorphin is released due exhaustion of abdominal muscles, which helps to alleviate the pain and stress caused due to Mathematics

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Anxiety. Finally, by practicing Development of Alternate Response towards Mathematics enables the student to practice six types of emotions after seeing Mathematics as stimulus (a sheet having problems related to addition, subtraction, Multiplication and Division in five digits). The student was first asked to show anger towards the stimulus, and then was asked to laugh at the stimulus followed by singing a song for it, further the student was asked to dance with the stimulus, finally expressed love and worship towards the stimulus. Therefore, by practicing these different emotional responses the conditioned response i.e Mathematics Anxiety, becomes neutral. These exercises, through principle of Reciprocal Inhibition, developed alternate emotional responses towards Mathematics Anxiety and found to be incompatible with it.

Whereas, Super brain Yoga is a simple and effective technique to energize and recharge the brain. It is based on the principles of subtle energy and ear acupuncture. It's a scientifically validated method to help super-energize the brain and enhance its sharpness and clarity. Super Brain Yoga is a fast, simple, drug-free method of calming the nervous system through generating Alpha waves in the brain. Alpha waves can be noticed through PET scan of the brain. These waves are usually seen when a person is in a meditative state or completely relaxed.

Super Brain Yoga technique enhanced Alpha waves in the brain and synchronized left and right brain hemispheres (Sui, 2005). Increase in Alpha waves in the brain indicated that the body has become relaxed and thus countered anxiety caused by Mathematics in the student. In addition Super Brain Yoga also synchronized left and right hemispheres of the brain and made the brain integrated. As, students having integrated brain are efficient in solving Mathematical problems by using resources of both left and right hemisphere (Oliver, 2009) thus the performance of the student increased significantly. Student responded well to these interventions and after six weeks was reassessed on short Mathematics Anxiety Rating Scale. Results showed that Mathematics Anxiety was reduced significantly (40%) from 60 to 20 and student's academic performance in Mathematics exam was significantly improved from 12/40 to 24/40 with an increase of 12 i.e 30%.

The student was reassessed after intervention on Taggart and Torrance's Information Processing Survey and the results showed that, student's dominant information processing mode was found to be 'integrated'. The increase in score from 8 to 18 revealed that the student had become more balanced in his approach and together with logic and intuition has a good scope in Mathematics subject.

To conclude, this study has shown that management of Mathematics Anxiety with Behaviour Modification techniques and Super Brain Yoga are found to be efficient.

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Conflict of Interests

The author declared no conflict of interests.

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A Study of Severity of Depression in Thalassemia Patients

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ABSTRACT

Background: Beta Thalassemia major is most common monogenic disorder in the world.. Transfusion dependent thalassemia major patients are at risk of iron overload and hence its associated complications. Thalassemia is a major sanitary problem not only for the patients and their families but also for each country's public health systems with regard to treatment expenses including regular injections, iron chelating agents, frequent hospitalizations and other medical consistencies and they are vulnerable to, social and psychological problems. **Objectives:** To determine prevalence and severity of depression in transfusion dependent Beta thalassemia major patients attending a tertiary care hospital. **Materials and Methods:** The study was done in a tertiary care hospital. Thalassemia major patients who received blood transfusions for 2 to 4 weeks interval in the hospital were included in this study. Clinical assessment of each child was done and psychiatric illness was diagnosed using ICD-10 DCR. Hamilton Depression rating scale (HAM-D) were used. **Result:** Males (80%) outnumbered females (20%) with male to female ratio of 4:1. Nearly half of the study population was aged between 10 to 12 years. Majority of the patients had one blood transfusion per month (91.43%). Out of 31 patients, 25 were males and 6 were females. Age range was 10 -18 years with mean age of 12.45 ± 2.41 years. The prevalence of depression was 41.94 % with majority showing mild depression. **Conclusion:** This study helps to know the severity of the depression in β thalassemia patients who are chronically ill and have prolonged treatment. Early assessment and treatment by psychiatrist will surely help to have good psychological condition.

Keywords: β Thalassemia; Depression

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Beta (β) thalassemia syndromes are a group of hereditary blood disorders characterized by reduced or absent β globin chain synthesis, resulting in reduced hemoglobin (Hb) in red blood cells (RBC), decreased RBC production and anemia. Most thalassemias are inherited as recessive traits. Three clinical and hematological conditions of increasing severity are recognized, i.e., β thalassemia carrier state, thalassemia intermedia, and thalassemia major. Every year approximately 1,00,000 are born with thalassemia in These patients with BTM require regular blood transfusions to survive. Regular transfusion is recommended to maintain a pretransfusion hemoglobin threshold not exceeding 9.5 g/dl. The combination of regular blood transfusions along with chelation therapy has dramatically increased the life expectancy of thalassemics.

Beta thalassemia major has a great negative impact on the well being of the patients. Affected children face many stresses in their whole life, including frequent blood samplings for laboratory tests, multiple transfusions and frequent subcutaneous injections and oral therapy of iron chelator drugs, which altogether make the patient susceptible to psychiatric burden namely depression and anxiety. Moreover, restrictions in social activities, fear, pain and worries about diagnostic procedures and transfusion every 2-4 weeks, which always induce stress leads to sickness absenteeism and poor academic school performance. Different studies have shown psychological disorders is more common in major thalassemia, and about 80% of them suffer from at least one mental disorder. The reports indicated the most common disorders were imaged of self-disfigurement, anxiety and major depressive disorder. Very limited research has been conducted in the field of psychiatric illness in Beta thalassemia major patients in India

Studies showed that chronic, physically limiting diseases such as thalassemia could have undesirable effects on mental health of patients and their families and lead to mental and emotional problems among them. Nevertheless, there has been little discussion on social-mental aspects of Thalassemia major.

In children mood disorders mainly consist of depressive disorder. MDD (Major Depressive Disorder) may begin at any age but the average age of onset is young adulthood. Prevalence of bipolar disorder in children is low and rare. Prevalence of depressive disorder in pre-pubertal children was 1-2%. It is estimated that prevalence rates for depression in children ranged from 0.4% to 2.5% for children and from 0.4% to 8.3% for adolescents.

Often depression is co-morbid with anxiety spectrum disorders and sleep problems. Children cannot express their mood and hence most of them present with somatic complaints like headache, abdominal discomfort, body pain, back ache, weakness at limbs. High depression scores are associated with low academic achievement, high scholastic anxiety and poor peer and teacher relationships.

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This data may help to understand the underlying psychiatry illness among these patients and relevant treatment initiated at appropriate time. There is lack of data in this region of Karnataka which provides description of prevalence of depression in these patients.

MATERIALS AND METHODS

The present cross-sectional study was done at a tertiary care teaching hospital from North Karnataka from January 2014 to December 2014. Universal sampling method was used and 31 β thalassemia major patients who received blood transfusions were selected during the study period. Prior to the commencement, ethical clearance for the study was obtained from the ethics committee.

Inclusion Criteria were all known diagnosed cases of thalassemia major who are aged 10 - 18 years and have received blood transfusions and admitted in hospital for two to four weeks intervals. Exclusion Criteria were patients who are known cases of other types of anemias requiring repeated blood transfusions or hospital admissions. Clinical assessment of each child was done and psychiatric illness was diagnosed using ICD-10 DCR. Hamilton Anxiety rating scale (HAM-D) were used to assess the severity of depression among all the study participants. The data obtained was coded and entered into Microsoft Excel Spreadsheet. Statistical analysis done by using WHO Epi Info 7 software and results tabulated. Categorical data was expressed in terms of rates, ratios and percentage. Continuous data was expressed as Mean \pm standard deviation, median and range.

RESULTS

This one year cross-sectional study was done in the Department of Pathology and Psychiatry from January 2014 to December 2014. A total of 31 patients registered under Blood Bank with thalassemia major were included in the study. The commonest age group was 10 to 12 years comprised of 58.06 % of the patients followed by 13-15 years age group (29.03 %). Majority (80%) of the patients were males and the male to female ratio was 4:1. HAM-D scores revealed No depression in 18 patients (58.06%), mild depression in 10 patients (32.6%) was seen, followed by 3 patients (9.68 %) who had moderate depression. None of the patients had severe depression as shown in Table 3.

DISCUSSION

β thalassemia major is a homozygous state which causes hemolytic anemia demanding regular blood transfusions. The availability of safe blood transfusions with adjuvant chelation therapy has facilitated and extended the survival rates of these patients. Multiple physical problems in thalassemia patients encouraged researchers to examine mental specifications of these patients. Different studies have shown psychological disorders is more common in thalassemia major. Environment and social factors, especially family, play important role in improving and decreasing depression of these patients. Some studies demonstrate that 80% of thalassemia

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major patients at least suffer from one psychiatry disorder. HAM-D rating scale included the following parameters- Depressed mood, guilt feelings, suicide, Insomnia, work and activities, retardation, agitation, anxiety –psychological, anxiety–somatic, somatic complaints –GI, general, Sexual disturbance, hypochondrias, weight loss by history and insight. HAMD severity was graded based on total score as Normal (0-7), mild depression (8-13), moderate depression (14-18) and severe depression (19-22) as shown in Table 2. Children more frequently develop social withdrawal, complain of psychosomatic symptoms, such as headache, abdominal pain or show irritability, poor school performance, social isolation and inability to handle frustration.

Cognitive-behavioral therapy which can be an effective psychological approach because it contributes to treatment compliance, reduces emotional burden of disease and improves quality of life.

CONCLUSION

The patients with transfusion dependent β thalassemia major are at risk of developing psychiatric illness. Thalassaemia patients require lifelong psychological support for prevention of mental health issues. Regular screening for symptoms is essential to identify at-risk individuals so as to provide appropriate psychological support with ultimate goal to improve both emotional and physical health. Overall, the present study showed risk of depression in these group of patients using optimum scales for early detection of illness and prevent the consequences.

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TABLES

Table 1 Demographic data.

Characteristics	Sub-groups	Total	
		No.	%
Age group (Years)	10 to 12	18	58.06
	13 to 15	09	29.03
	16 to 18	04	12.91
	Total	31	100.00
Sex	Male	26	80.00
	Female	05	20.00
	Total	31	100.00

Table 2 Grading of severity of depression on HAMD scores.

Total HAM-D Score	Rating
0-7	Normal
8-13	Mild
14-18	Moderate
19-22	Severe

Table 3 Severity of depression among study participants.

Depression	Frequency	Percentage
No depression	18	58.06 %
Mild	10	32.26 %
Moderate	3	9.68 %
Severe	0	0.00 %

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Effectiveness of Learning style on Educational Achievement of the Students of Standard-XI in Context to Gender

Dr. Bhavik M. Shah^{1*}

ABSTRACT

In the Era of Change, teacher should consider the individual differences while teaching in the classroom. In fact teacher must keep in mind the individual differences for teaching. Students have so many talent, we as a teacher must have that angel of view of identifying it. This individual difference can be divided in dimension of Learning Style, too. Researcher is giving service in High School as a teacher, he observe such a learning style in class room. Is there any relationship between Educational Achievement and Learning Style? To find the answer of this question, present study was conducted.

Keywords: *Learning Style, Standard-XI, Gender, Educational Achievement*

There is always an individual difference in classroom. This individual difference has different angles. All students have their own styles to learn. There are different models defining learning styles i.e. Kolb's Model, VARK Model, VAK Model, etc. In VAK Model there are three modality of learning which is known as three learning styles. According to VAK Model, three Learning Styles are as followed:

- 1) Auditorial Learning Style
- 2) Visual Learning Style
- 3) Kinesthetic Learning Style

Dangaval and Mitra (1998) find that both ages have negative correlation. Present study was conducted to study the Educational Achievement of students in context of their Learning Style. **Diyaz and Kartanal (1999)** find that online students were found more independent than offline students and online students were found more reflective than Offline students. **Kokare (2000)** find that there were significant difference between students having reflective observation and active experimentation.

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Effectiveness of Learning style on Educational Achievement of the Students of Standard-XI in Context to Gender

Statement of Problem

For present study, Researcher studied Educational Achievement of standard-IX's students in context to their learning style with references to Gender.

“Effectiveness of Learning style on Educational Achievement of Standard-XI in context to Gender”

Objectives

Any study can't be meaningful unless objectives are formed, thus objectives for present study were as followed:

- ✓ To Construct L.S.I. (Learning Style Inventory)
- ✓ To study Educational Achievement of Students in context to their Learning Style.
- ✓ To study Educational Achievement of Students having Visual Learning style in reference to Gender.
- ✓ To study Educational Achievement of Students having Auditorial Learning style in reference to Gender.
- ✓ To study Educational Achievement of Students having Kinesthetic Learning style in reference to Gender.

Hypothesis

According to Objectives hypothesis were formed as followed:

HO₁ :There will be no significant difference between educational achievement of students having Visual and Auditorial Learning Style.

HO₂ : There will be no significant difference between educational achievement of students having Visual and Kinaesthetic Learning Style.

HO₃ : There will be no significant difference between educational achievement of students having Auditorial and Kinaesthetic Learning Style.

HO₄ :There will be no significant difference between Educational Achievement of boys and girls having Visual Learning Style.

HO₅ :There will be no significant difference between Educational Achievement of boys and girls having Auditorial Learning Style.

HO₆ :There will be no significant difference between Educational Achievement of boys and girls having Kinesthetic Learning Style.

Variables

Independent Variable

Learning Style	Visual Learning Style
	Auditorial Learning Style
	Kinesthetic Learning Style

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Dependent Variable

Educational Achievement of students
(Percentage of Standard-X obtain by students)

Moderator Variable

Gender	Boys
	Girls

Control Variable

Standard-IX
Medium- Gujarati
Area – Gandhinagar District

Population

“Population is a group from which representative sample is selected and findings are generalized.” Researcher has tested educational achievement of students in context to their learning style. For Presents study, Students studying in Standard-IX of Gandhinagar District in Gujarati medium is population.

Sampling

Sampling frame of all Higher Secondary Schools (Commerce Stream) in Gandhinagar District is made. This list is stratified in Rural and Urban and then Sample was selected in proper portion. All selected school’s all Standard-IX’s class’s all students were selected by Cluster sampling Technique. By this method 700 students were selected, but 93 students who were having same score on L.S.I. (Learning Style Inventory) removed. Thus, School’s selection was by Stratified Sampling Technique and Students were selected by Cluster Sampling Technique. Hence at last there were 607 students were selected in sample.

Tool for Data Collection

Researcher has made self constructed L.S.I. (Learning Style Inventory). For that following steps were followed:

Step-1 in depth study of three types of learning style

For present study, researcher selected V.A.K. (Visual, Auditorial and Kinaesthetic) Model among different learning Style Models. In this V.A.K. Model, Visual, Auditorial and Kinaesthetic Modality of learning was used as a component. To construct tool, in depth study of these three learning modality (Learning Style) was used.

Step-2 Writing of Statements for L.S.I. (Learning Style Inventory)

After studying three learning style in depth, statements for these three learning styles were framed.

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Step-3 Primary form of L.S.I. (Learning Style Inventory)

After writing statements for three learning styles, three separate lists were prepared. First form of L.S.I. (Learning Style Inventory) was prepared.

Step-4 Expert review of primary form of L.S.I. (Learning Style Inventory)

First form of L.S.I. (Learning Style Inventory) along with letter showing Objectives of study and Primary Information was given to experts to review.

Step-5 Piloting

After getting review from expert, necessary changes were applied and L.S.I. (Learning Style Inventory) was prepared for piloting. Piloting was done on sample size of 100 by purposive sampling technique.

After piloting for three lists of three different learning styles were prepared and also scored. All three tools were arranged in descending order according to scores. 't'-value was found between Upper 27% (27) Students and Lower 27% (27) Students statement wise. Statements having most significant difference were selected in final form of L.S.I. (Learning Style Inventory). Detail of Item Analysis of L.S.I. (Learning Style Inventory) is shown in Table No. 1

Table No. 1, Details of Item Analysis to Select Statements

No.	Learning Style	Total Statements	Selected Statements
1	Visual Learning Style	28	26
2	Auditorial Learning Style	26	15
3	Kinaesthetic Learning Style	25	20

Here there were 15 statements of Auditorial Learning Style having significant difference selected in final form of L.S.I. (Learning Style Inventory). For equal probability of statements response, 15 Statements of each Visual Learning Style and Kinaesthetic Learning Style having most significant difference were selected in final form of L.S.I. (Learning Style Inventory).

Step-6 Final form of L.S.I. (Learning Style Inventory)

After Item Analysis with letter of Primary Information and variables, final form of L.S.I. (Learning Style Inventory) was prepared.

Data Collection

For collecting data, permission was asked to principal of selected schools. After getting permission, rapport was established with students and then data was collected.

Data Analysis

- Obtain score was entered in Excel Programme of M.S. Office.
- All data was classified variable wise with the help of filter.
- To test Null Hypothesis, 't'-test was applied.

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Table No. 2, Nature of Sample in references to learning styles

No.	Learning Style	No. Of Students	Percentage
1	Visual Learning Style	386	63.59 %
2	Auditorial Learning Style	138	22.73 %
3	Kinaesthetic Learning Style	83	13.67 %
	Total	607	100 %

Pictorial Presentation is as followed:

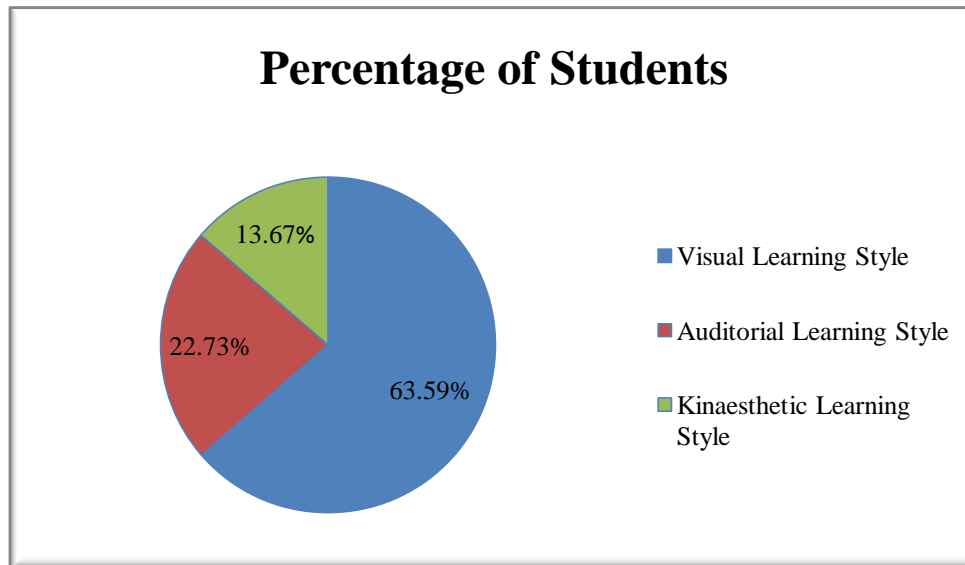


Figure showing nature of sample in references to learning styles

Table No. 3, Table showing standard-10's Percentage Mean, Standard Deviation, Standard Error of Deviation and t-value of students having Visual, Auditorial and Kinesthetic learning style

Group	N	M	SD	SED	t-value	Remarks
Visual Learning Style	386	64.30	12.34	1.09	1.42	NS
Auditorial Learning Style	138	62.76	10.44			
Visual Learning Style	386	64.30	12.34	1.25	1.87	NS
Kinaesthetic Learning Style	83	61.96	9.89			
Auditorial Learning Style	138	62.76	10.44	1.40	0.57	NS
Kinaesthetic Learning Style	83	61.96	9.89			

From Table No.3, we can say that Calculated Value of t is less than tabulated value of t at 0.05 level for all first three hypothesis. Hence H_{01} , H_{02} and H_{03} are accepted.

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Table No. 4, Table showing standard-10's Percentage Mean, Standard Deviation, Standard Error of Deviation and t-value of students having Visual, Auditorial and Kinesthetic learning style in context of Gender

Learning Style	Group	N	M	SD	SED	t-value	Remarks
Visual Learning Style	Boys	263	61.05	9.37	1.46	6.99	0.01
	Girls	123	71.25	14.85			
Auditorial Learning Style	Boys	109	63.83	10.37	2.08	2.46	0.05
	Girls	29	58.72	9.84			
Kinesthetic Learning Style	Boys	57	59.79	9.44	2.21	3.13	0.01
	Girls	26	66.72	9.31			

From Table No.4, we can say that Calculated Value of t is more than tabulated value of t at 0.01 level for Ho₄ and Ho₆ and Calculated Value of t is more than tabulated value of t at 0.05 level for Ho₅. Hence, Ho₄, Ho₅ and Ho₆ are rejected.

Findings

Findings for present study were as followed:

1. There was no significance different in educational achievement among students having Visual Learning Style, Auditorial Learning Style and Kinesthetic Learning Style.
2. In matter of educational achievement, Girls are superior to Boys among students having Visual Learning Style.
3. In matter of educational achievement, Boys are superior to Girls among students having Auditorial Learning Style.
4. In matter of educational achievement, Girls are superior to Boys among students having Kinesthetic Learning Style.

Conclusion

In present chapter researcher discussed Problem of study, Objectives, Importance of study, Limitation, etc. for knowing clear Pre-face for researcher. In next chapter researcher will discussed Importance of Review of related Literature and Review of previous research on the topic with the significance of the present study.

Acknowledgments

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Conflict of Interests

The author declared no conflict of interests.

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Exploring the Sri Lankan Student Perceptions Pertaining To School Counseling Services in Their Schools

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ABSTRACT

This study explores the Sri Lankan students' perceptions of their school counselors and counseling services available to them. It comprises of two phases involving data collected through in-depth interviews (n = 10) and semi-structured interviews using a survey questionnaire (n = 126). The data were collected during two measurement points.

Findings convey that the students did not provide positive evaluations of school counseling services during both phases, depicting the reluctance to access it due to several key factors. They are: social stigma associated with accessing counseling services, location of the counseling room, misperceptions pertaining to its aims and objectives, ignorance, and lack of time. The study provides suggestions and recommendations for policy makers, teacher educators and school counselors with the broad aim of improving the quality of the school counseling services in Sri Lanka.

Keywords: *School Counseling, Student Perceptions, Sri Lanka*

Sri Lankan Students: Mental Health Profile

Available literature on Sri Lankan students' well-being depict high prevalence of mental health problems among Sri Lankan students, especially adolescents (Rodrigo, Welgama, Gurusinghe, Wijeratne, Jayananda, Rajapakse, 2010; Thalagala, Rajapakse, & Yakkandawala, 2004). Common psychological problems among Sri Lankan students included stress experienced due to exam anxiety, academic pressure, loneliness, social discomfort, distress experienced due to frequent scolding by the parents, problems with teachers (Roderigo et al, 2010; Thalagala et al., 2004), hyperactivity, and inattention. Also reported were issues pertaining to peers (Perera, 2009), dating partners, and video game addiction. A study carried out by Roderigo et al, (2010) found that out of 445 adolescents' school goers, thirty six per cent were screened positive for

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mild and severe depression while 28% were screened positive for severe anxiety. When Perera (2009) surveyed the 'Mental health of adolescent school children in Sri Lanka, she found that nearly 1 in 5 Sri Lankan adolescents (18.9%) appear to have clinically relevant mental health symptoms.

Findings of these studies clearly point out that mental health service providers in Sri Lanka should be concerned about the mental health needs of its students, particularly adolescents. These studies also call for continuous mental health service provision at the institutional and community level by trained mental health professionals including counseling teachers. In this context, the importance of school counseling looms large.

However, in the Sri Lankan milieu, there seems to be an urgent need for school counselors with 1086 guidance teachers employed in Sri Lankan government schools, providing psychosocial services to 4,004,086 students; making the counselor student ratio to be 1: 3687. This is far below the ratio recommended by the American School Counselor Association (The school-counselor- to student ratio of 1:250) (Ministry of Education, 2013).

Further, school counseling in Sri Lanka experiences varied challenges. Among them are the need for more school counseling professionals (Pathirana, 2016), mental health service providers (Samarasekara, Davies & Siribaddana, 2012), fewer resources, Sri Lanka's continuous struggle to develop a national certification and licensing standards for counseling (Pathirana, 2015; Pathirana, 2016), and difficulties in creating a comprehensive counselor trainings.

Despite making repeated calls for the development of counseling services over the past decades, advancements of school counseling have been slow to progress in the Sri Lankan milieu. Even though Sri Lankan education system is striving to make school counseling more accessible than ever to its students; it requires to be noted that allocations to improve the psychosocial wellbeing of its future citizenry is not satisfactory. Especially after considering the recent positive, dramatic economic advances (Central Bank of Sri Lanka, 2013) made by Sri Lanka.

Also, having realized the importance of the school counseling, Sri Lankan schools also seemed have become more receptive towards school counselors. As a result, many schools in Sri Lanka, especially one in urban areas, seem to be gradually welcoming the services of school counselors. Particularly, when addressing mental health issues within Sri Lankan students. This acceptance and importance attributed to the school counseling services seemed to have increased in many folds after conflict and the impact of Tsunami. As a result, the government of Sri Lanka has also recently initiated to advance school counseling services available to Sri Lankan students (MoE, 2013). This appears to be welcome change from the past scenario of inattention to this arena. Nevertheless, school counseling as a profession appears to be still at a developmental level in Sri Lanka.

Importance of School Counseling

School counselors as important members of the education team, who assist students in the areas of academic achievement, personal/social development and career development is a widely acclaimed fact (American School Counselors Association, 2016). The primary role of the Sri Lankan school counselor in the present education system is considered to be; ensuring students achieve productive, well-adjusted future as fully functioning adults of tomorrow (Pathirana, 2015).

Globally, school counselors have become an increasingly valued addition to education systems. Thus, school counsellors are considered to serve an important role in maximizing student success (Fox & Butler, 2009; Lapan, Gysbers, & Kayson, 2007; Stone & Dahir, 2006). Moreover, responsibility of the school counselors involves supporting a safe learning environment and ensuring the right based approach of the school community (Sandhu, 2000) while providing student friendly/fair and culture sensitive prevention/ intervention programs (Lee, 2001).

School counselors or counseling teachers as they are more popularly known in Sri Lanka are also uniquely positioned to impact the mental health and academic success of the Sri Lankan students. This is mainly due to their knowledge, competencies and skills acquired from their professional training. The direct access and interaction they have with students, class teachers, subject teachers and administrative authorities also provide them with the unique opportunity to also address mental health concerns of the students.

A substantial number of researchers have studied students' perceptions toward school counselors. Most of them have been carried out in the Western world, with a few emanating from Sri Lanka (Chathurika, 2015) or other South Asian countries. As a result, very little is known about the amount of counseling that Sri Lankan students actually receive in schools or how they perceive school counselors and the school counseling service provisions.

Hence, the present study aims to explore the perceptions of Sri Lankan students towards counselors in their schools is timely and necessary one. For the purpose of this study, "student' perceptions" is used to refer to how students perceive of the role and tasks of the school counselor to the expectations they have of the counselor.

METHOD

The study comprised of two phases with phase one aiming to explore an in-depth' view of Sri Lankan students towards their school counselors while phase two examined the students' perceptions of their school counselors using a semi-structured interview format.

Phase I

Phase I, Participants - The participants for this phase of the study were 10 adolescents (Girls = 06; Boys = 04) coming from different socio-economic backgrounds and demographic contexts in

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Sri Lanka. Before conducting the interview the participants were briefed about the details of the study including the purpose, voluntary participation, and the venue/ time of the meeting. If given consent, during the initial contact, time and venue for the interviews were arranged. None of the respondents refused to participate in the interview.

During this phase the participants were allowed to freely speak of the counseling services they receive in their schools. Out of 10 participants only six mentioned that they have a school counselor in their schools.

Phase II

Table 01: Characteristics of the Participants

	M	S.D	f	%	N.R
Sample Size (N = 126)					
Gender (n = 110)					
Male	16.32*	1.923*	48	38.1	
Female	16.32**	1.567**	62	49.2	
Gender not responded to			10		
Age	16.34	1.67			
Age not responded to					
Educational Level (N = 110)	11.3	1.345			
Grade 08			04	3.2	
Grade 09			06	4.8	
Grade 10			21	16.7	
Grade 11			21	16.7	
Grade 12			42	33.3	
Grade 13			12	9.5	
Completed Education			04	3.2	
Grade not responded to			16	12.7	

N = 126;

For the phase II of the study, participants completed a survey questionnaire which explored the factors affecting psychosocial wellbeing of the Sri Lankan adolescents. This phase of the study explores Sri Lankan students' perception of their school counselors. All information students provided in the survey was anonymous. The demographic sections of the questionnaire included items such as students' grade level, gender while the section which examined the school counselors requested the students to come up with responses to the questions such as, 'Which teacher do you go to when you have a problem?', 'Do you have a school counselor in your school?', 'Do you go to school counselor if and when you have a problem?', 'If not what are the reasons for it?...

Instrument

The data was collected using semi-structured questionnaire in order to gain answers for defined questions. The items included both open and close-ended questions. However, the study used questionnaires which consisted mainly of closed items. As the instrument is designed and tailored for this study, there are no measures of validity or reliability provided.

RESULTS

Phase I

Findings of the phase I were analyzed using constant comparative analysis (Glaser, 1976). Through this qualitative method, the findings were analyzed a number of times until overarching categories of meanings generated by interviewees were identified. The analysis came up with following key themes which can all be categorized as limitations of school counseling. They are further discussed under the sub-categories of: 1. breach of confidentiality, 2. stigmatization associated with school counseling and 3. Characteristics of the school counselor which serves as push factors from students' accessing counseling services. In order to provide detailed descriptions of these sub-categories, narratives of the adolescent participants are provided below each sub-category.

1. Breach of confidentiality

'Apo!' (Sinhalese expression to magnify the strength of the statement) *No one goes there... there are some students who go, but I haven't...because when we tell her our problems the whole school get to know them...though she tells that she would never reveal them...but tells everyone (17 year old adolescent girl).*

2. Advising

Earlier the counseling teacher in our school was very helpful, I used to tell her everything...she has also taught my mother...and they came to know each other (this girls has been neglected by her mother since she was nine years old. Her mother does not physically or psychologically support her)...later...maybe my mother told her something...since then she is always angry with me...then she used to look at the problems from my mother's perspective...next, told me to do this do that (meaning that the counseling teacher started advising scolding her, based on her mother's feedback about her)...now that she knows (the counseling teacher) that I am studying (doing well in academics) she hugs me and talk to me...I do not mind...(meaning she does not mind the earlier episodes of anger/criticisms/scolding's...)...because she is teacher (meaning she is ready to forgive and forget) (6/Female/17yrs).

3. Perceived characteristics of the counseling teacher

The teacher who have been assigned for counseling at present is a different character...she is very strict...therefore no one tells her anything (meaning that no one goes to her for counseling). She is not suitable for counseling...(6/Female/17).

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Yes, we have a counseling teacher in our school...many go...but I don't...because one day I had enough of her...because she took sides...I don't like it when someone scolds (meaning saying negative things) about the teachers that I like...one day I told her one teacher was good and she said no she is not...and this and that... (meaning that counseling teacher told him negative things about the teacher that he liked) then I told her, 'teacher, do not talk bad things about her without you really knowing them to be true...' after that I did not go to her...that day (meaning the day that counseling teacher criticized the teacher he liked) I did not go for counseling but just (meaning without any purpose he visited the school counselor)...(3/Male/17yrs).

Ignorance

I don't know whether our school has a counseling teacher...we have a teacher in charge of discipline...but we can talk to her about anything even though she is good (8/F/18).

However, the study also records that adolescents mentioned name of teachers whom they can approach when they have a problem. Findings convey that the characteristics which adolescents seemed to value in them are confidentiality, ability to listen, and accessibility.

Preference to tell their concerns/ problems to other teachers

I can tell anything to my class teacher...Buddha has told 'do not give internal problems to outside'...that sir is like that, he has that quality...therefore we tell our problems to that sir...and there is another sir who came for music (came to teach music)...that sir is also good...can talk anything and find solutions (3/Male/17yrs).

We don't have a counseling teacher in our school, if children have problems they talk to the class teacher...then that madam give a solution (4/Male/16yrs).

Phase II: Semi Structured Interviews

Phase II of the study explored

Table 02: Which teacher do you go to when you have a problem?

		f	%
1	Subject Teacher	94	74.6
2	Class Teacher	6	4.8
3	Counseling Teacher	7	5.6
4	All Teachers	3	2.4
5	Other	1	.8
6	Not Responded	15	12.7

N = 126;

Table 02 conveys that the majority of the participants preferred to confide in subject teachers (94, 74.6%), while only few students preferred to confide in class teachers (n = 6, 4.8%),

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counseling teachers ($n = 7$, 5.6%), all teachers included in the above three categories ($n = 3$, 2.4) and others outside the school premises other than teachers ($n = 1$, .8%).

Table 03: Do you have a school counselor in your school?

Yes		No		Not Responded	
<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
72	57.1	46	36.5	8	6.4

In response to this query majority of the participants have said that there is a school counselor in their schools ($n = 72$, 57.1%) while 46 (36.5%) have said that they do not

Table 04: Do you go to the school counselor in your school, if and when you have a problem?

Yes		No		Not Responded	
<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
09	7.1	80	63.5	37	29.4

$N = 126$

The next objective of this study was to examine how many participants had sought counseling services from school counselors. Only a handful of the participants (7.1%, $n = 09$) reported having visited school counselors at least once in comparison to majority of the participants who had not visited the school counselor in their schools (63.5%, $n = 80$).

Table 05: Factors which prevent Sri Lankan students from accessing counselling services

	Cause	Narratives of the participants
1	Breach of confidentiality, no faith	'She does not maintain confidentiality', 'she cannot be trusted (meaning the school counselor)'
2	Location	'Counseling room is located next to the principal's room', 'School counseling room is near the staff room'
3	Stigmatization	'Students in my school laugh at the those who go to the counseling room'
4	Ignorance	'I do not know whether our school has a counselor', 'I do not know whether we have counseling room in our school'
5	Misperception	'We do not go there only disable students do', 'It is a place for students who experience very severe psychological problems', 'Counseling teacher is responsible for discipline'
6	No need/ No Problems	'We do not have problems therefore we do not go there', 'We do not have a need for school counseling'
7	No time	'we have lot of school work and no time to go to the counseling room'
8	Students like to go to others teachers	'we tell our problems to other teachers and they give solutions'
9	Other	'we like to tell our problems to friends', '

Note: Responded = 43; Not Responded = 83

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The specific reasons mentioned by the students were no faith in the counselors, records or rumors of breach of confidentiality by the school counselors on past occasions with other students, location of the counseling room, stigma towards mental health and stigmatization and shame attached to the students who visit the counseling room, student perception of the school counseling room as a place for those with severe psychological problems or for student with disability, lack of time due to academic pressure and commitments, and past records of confidentiality breaching.

DISCUSSION

The present study explored the Sri Lankan student perceptions towards their school counselors/ counseling services available to them, through multiple methods at two different measurement points. Majority of the participants mentioned that they have a school counselor in their schools which indicate that school counseling is functional in the Sri Lankan schools.

Findings conveyed that majority of the participants reported avoiding school counselor as well counseling services even upon availability. The reasons which stood out for not seeking the counseling services were; ignorance, lack of time, issues pertaining to confidentiality, location, stigmatization and misperception. Thus, findings indicate that even those few Sri Lankan schools fortunate in procuring the service of a school counselor may not effectively be offering it to their students in an efficient manner (Pathirana, 2016).

Although Sri Lanka has seen the presence of school counselors' increase in schools, the results of the present study convey that it is still not common for students to seek counseling services. The paper argues that one of the reasons for this could be due to the fact that Sri Lankan school counselors relies heavily on the Western model of one to one counseling approach (i.e. 'expect students to approach them individually when in need of or having personal issues in their lives). On the other hand, the findings convey that Sri Lankan students' are less likely to endorse help seeking behaviors from individuals who are not well known due to their cultural background.

Therefore, the Western and internationally developed frameworks may not be implicitly transportable to the Sri Lankan milieu. Moreover, the traditional Western standards and definitions of counseling may not represent the optimal solutions for Sri Lanka. Thus, the study urges the researchers, educationists and school counselors to explore culture sensitive/ friendly ways of providing school counseling more accessible to Sri Lankan students.

As the present study reports, whether students know about the availability of counseling services in their school or not is a major determinant of whether they access or do not access counseling services, a factor which has been also confirmed by previous research (Fox & Butler, 2007). Thus, the present study recommends that the schools require informing the students whether they have access to this service.

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The responses of the students in this study demonstrate that one of the factors which prevent them from approaching the school counselor is the lack of perceived ‘trustworthiness’ of the counselors. Participants in the study felt hesitant to approach the counseling teachers with their problems due to their past perceived/actual experiences pertaining to the breach of confidentiality. Literature (Le Surf & Lynch, 1999; Jenkins & Palmer, 2011; Mushaandja, Haihambo, Vergnani, & Frank, 2013) conveys that issues related to confidentiality serve as a hindrance to students seeking counseling services. Further, literature (Setiawan, 2006) also conveys that students have more positive experiences when their school counselors are trustworthy. Hence, trustworthiness seems makes a difference in building positive relationships and a climate for disclosure. In such a climate, students who have difficulty with their classes can be comfortable in approaching the school counselor for help.

Further, student’s perceptions of mental and psychosocial wellbeing as aspects alien to health in comparison to their views on physical health may also have contributed to their failure to access counseling services. Sri Lankan cultural beliefs promote solving family-related issues inside one’s own family. Thus, participants are also less likely to endorse help-seeking attitudes than students in the Western worlds. This could be one of the reasons that students were reluctant to visit the school counselors. Another reason for students’ reluctance was the misperception that it is place for ‘mentally handicapped students or students with severe psychological problems. Again, such belief calls for awareness on the objectives and benefits of school counseling services to the Sri Lankan students.

Considering the reluctance of the Sri Lankan students to approach school counselors in order to access psychological services, the present study recommends several ways that they be available to students through multiple and varied channels. They are, group activities, lectures on common psychological concerns, parent and teacher consultation, peer support, and classroom guidance along with individual counseling.

Findings conveyed that the location of the counseling room served as push factor which discourage students from accessing counseling services; as it is situated near the Principal’s room or the staff room. A previous study on student perception of school counseling conveys the unavailability of a separate room for school counseling or the counseling room being uncomfortable to discuss issues requiring confidentiality (Chathuruka, 2015). Thus, the present study identifies the importance of comfortable, child friendly location for school counseling away from the staff rooms or the Principal’s room which would make the students feel safe to discuss their problems.

Further, Participants responses also conveyed that school counselor also serve as relief teachers or disciplinary teachers. Even though this could be due to the lack of awareness within the school

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authorities pertaining to the role of the school counselor and shortage of staff due to unequal distribution of teachers across the country (MoE, 2013; UNICEF, 2009); literature finds that the dual role of teacher-counselors may adversely affect and place restraints on the counselor's time. It may also discourage students from accessing counseling facilities (Menon, 2010; Walker, Alloway, Dalley-Trim, & Patterson, 2006; Kuhn, 2004). Hence, findings of the present study recommends the concerned authorities to avoid bestowing other roles and responsibilities on counseling teachers, especially overseeing discipline as such duties may prevent students from going to the counselors with their problems.

Further, the paper also recommends several changes to the training and education of the school counselors based on the outcomes of the present study to build trustworthiness within practicing as well as future counselors. Out of them, 1. importance of child friendly/sensitive communication, 2. Understanding their roles and responsibilities as a school counselor (Pathirana, 2015), 3. Fair treatment of students, 4. Establishing a climate of belongings, 5. Competence to carry out required psychosocial interventions in a child friendly and culture sensitive manner are factors which looms large. Among these activities in building trustworthiness and competence within school counselors seemed to be the most important one to popularize school counseling among the Sri Lankan students. Hence, the paper also suggests that Sri Lankan school counselors may want to self-evaluate their services and seek further training, especially in the areas of confidentiality and trustworthiness.

As would be expected with developing profession in any country, there are numerous challenges to school counseling in Sri Lanka such as tremendous shortage of qualified school counselors, as well as an urgent need for more accredited training programs which may serve as factors affecting the student approachability.

Hence, it is recommended that those responsible for the education and training of school counselors require taking note of two important aspects of their training programs: First, paying attention to the communication patterns of counselors, and second, providing information to school counselors to reduce their lack of understanding of Sri Lankan student experiences. Literature also conveys that quality of training and supervision was among common concerns (Pathirana, 2016) in the Sri Lankan milieu; for school counselors. Moreover, accredited professional training programs at the university or teacher training college level must be designed and established. Courses requires to be targeting the knowledge and skills that school counselors need most with opportunities for supervision, practice and professional development. Thus, Sri Lanka is in also an urgent requirement of a National Counseling Licensing Board for licensing and certification of counseling, which offers qualification exams for counselors, including school counselors.

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The findings of the present study convey that majority of the participants had approached subject teachers. Hence, the subject teachers in turn appear to perform a wide variety of counseling tasks. However, these subject teachers may not receive sufficient training in providing counseling services in the Sri Lankan milieu. Therefore, the present study recommends the teachers trainers and concerned authorities to provide at least basic counseling skills and competencies to subject teachers in Sri Lankan schools.

Empirical research on school counseling convey the importance and development of school counseling services that fit the needs of students and the society in Sri Lanka is limited. Thus, the present study contributes to the literature by filling a much required research gap (i.e. Sri Lankan students' perception of the school counseling services and the school counselors in their schools). Even though this study represents a small step in evaluating perceptions about Sri Lankan students about their counseling service provisions, contributes to the information gap on the student utilization of school counseling services. This line of inquiry is very important for the future development of the school counseling services in Sri Lanka; in the context of providing training as well as improving mental health services available to the Sri Lankan student population. The study also provides valuable information for educators, policy makers, school administrators, researchers and most importantly school counselors, in order to improve the quality of the provision of school counseling services in Sri Lanka.

However, there were a number of areas in this study that limit generalization and call for additional research. First, the sample in this study was a convenient sample. Second, the number of times that students have visited the counseling office, or the length of time that these counseling sessions were held (if and when) was not obtained. Third, the instrument was designed and tailored specifically this study. As a result, there are no measures of validity or reliability provided.

Thus, based on its findings the present study makes following suggestions and recommendation for the future research. They are: 1. Conduct empirical research on Sri Lankan school counseling services and service providers with aim of exploring ways to improve school counseling as a profession (e.g. identify factors that might enhance students' utilization of school counseling services and what students need the most from school counseling...), 2. Explore alternative, student friendly and culture sensitive ways of providing school counseling and other psychosocial support services. 3. Explore ways to make school counseling services more accessible for Sri Lankan students, 4. Identify ways to prevent/ minimize stigmatization associated with the accessing school counseling services within Sri Lankan students, and 5. Explore the perceptions of the school counselors in their interactions with students.

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In conclusion, it could be said that this study addresses an important area of research that has not been adequately explored in the Sri Lankan milieu. As the present research evidence there is an urgent need to encourage more students to utilize the services of the school counselors.

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Conflict of Interests

The author declared no conflict of interests.

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A Study of Family Stress among Non-Working Married Male and Female: A Special Reference with Rural Area of Patna

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ABSTRACT

The present age has been called the age of stress and strain. Stress is defined as “the non-specific response of the body to any demand placed upon it”. The study seeks to assess the stress level among Non-Working married Male and female. Today every individual is stress prone. It was assumed that there will be no significant difference between married male and female when family stress is taken as a dependent variable and no significant difference in family stress between non-working married male and female separately. 200 married, 100 male and 100 female were the samples for the investigation. Family stress inventory, by Dr. Abha Rani Bisht (Hindi) was used. It was found that there was no difference in family stress between married male and female. Further concluded that there was no difference in family stress of married non-working male and female when studied separately under joint influence of sex and age.

Keywords: *Stress, Non-working, Individuals, Suffering*

Modern era is the era of science and technology where everyone is striving to excel in his/her field whether it is at home or at work place. In this modern era, stress has become a universal phenomenon. We all strive to maintain and actualize ourselves on both biological and Psychological levels. Our needs, motives and goals directed behaviour are directed towards this end. Success is not the essence of life and therefore while maintaining and enhancing ourselves, we are faced with obstacles internal and external. It may result in state of frustration as we have seen earlier, or more needs or valued goal may lead us to some conflicting situation, individual can be in stress for number of times in day/month or year and the amount of stress also varies. In general, Non working married male and female are more likely than working male and female to experience physical symptoms of stress, such as fatigue, irritability, headaches and depression. Women are also more likely than men to cope with job stress with unhealthy behaviors, such as poor eating habits etc.

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Concept of Stress:

Stress is difficult to define precisely. The concept of stress was first introduced in the life sciences by Selye Hans in 1936. It was derived from the Latin word 'stringere'; it meant the experience of physical hardship, starvation, torture and pain. Selye Hans, 1936 defined stress as "the non-specific response of the body to any demand placed upon it". Further, stress was defined as "any external event or internal drive which threatens to upset the organism equilibrium". Another definition given by Stephen stress has been stated as "a dynamic condition in which an individual is confronted with an opportunity, constraint or demand related to what he/she desires and for which the outcome is perceived to be both uncertain and important." According to Robbins & Sanghi. "A dynamic condition in which an individual is confronted with an opportunity, constraints, or demand related to what he or she desires and for which the outcome is perceived to be both uncertain and important." Stress affects not only our physical health but our mental wellbeing, too.

The word „Stress“ is used in at least two different ways. First it is defined as the state of psychological unrest or disequilibrium in the human beings. What to do and what not to do? How to do? And where to go? Such questions depict the stage or stage of stress, under which one is expected to act or behave in more serious situation. When an individual reaches a point where the physical processes are seriously affected, the mental processes are confused.

Concept of Family Stress:

Family stress can be defined as a real or imagined imbalance between the demands on the family and the family's ability to meet those demands. In the definition of family stress, the demands in the family are commonly referred to as stressors. A stressor is a life event or transition that happens in the family. It can be either positive or negative and can cause a change in the family's coping pattern. Benjamin Franklin said the only things a person can be sure of in this world are death and taxes. It should be noted that a third sure thing exists. This third reality is family stress and it involves change. Children change, parents change, often for the better. But you are also expected to endure those not-sopleasant life events such as death and illness in the family. Certainly, these events bring about feelings of hurt, frustration, anger, and depression. In the family we may experience marital conflict, sibling conflict, or parent-child conflict, all in response to family stress. Family stress is a state that arises from an actual or perceived demand and capacity imbalance in the family's functioning which is characterized by a multi-dimensional demand for adjustment or adaptive behaviour. Family stress lead to the maladjustment of the child and some stressful imbalance. It is problematic only when the degree of stress in the family reaches at a level that the family members become dissatisfied or show symptoms of disturbance .Boss (1998) described family stress as "a pressure on the family, it is disturbance of the family steady state. The family system is upset, pressured, disturbed and not at

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rest. Family stress, therefore, is a change in the family's equilibrium". Family stress is a social group characterized by common residence, economic, cooperation and re-production.

REVIEW OF LITERATURE

Hashmi et al. found that working married women have to face more difficulties in their lives like they experienced more stress and depression as compared to non-working married women. Sanlier & Arpacı. The studied the effect of stress on women health. Results reveal that employed women in the stress scale have a higher average score than that of the non- employed women. It has been determined that total stress scores of employed women were higher as compared to non- employed women and that there was a significant difference between women's working status and total stress scores. Employed women had higher level of stress than non- Employed women.

Statement of the Problem:

In each development stage, individual start suffering from different types of stress. Due to the complexity of life, there are many obstacles, both environmental and Personal that may interfere in proper adjustment of the child. Such obstacles place adductive demands or stress on the individual. It results in a state of stress and frustration. In modern societies life has become very fast. Everybody is over busy in order to meet the basic needs, educational needs, personal needs and social needs. People are struggling throughout the day. As a result at home or in the family, parents and children both are suffering from stress and strain.

Objective:

1. To find out the significant difference between Non-working married male and female, when family stress is taken as a dependent variables.
2. To study, the significant difference in family stress between non-working married male and female separately.
3. To study the significance of difference in family stress between Non-working married male and female separately in relation to age and sex.
4. To study the significance of differences in family stress under the joint influence of age and sex non-working married male and female separately.

Hypothesis:

1. There will be no significant difference between Non-working married male and female, when family stress is taken as a dependent variable.
2. There will be no significant difference in family stress between non-working married male and female separately.

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3. There will be no significance of difference in family stress between Non working married male and female separately in relation to age and sex.
4. There will be no significance of differences in family stress under the joint influence of age and sex from non-working married male and female separately.

METHODS AND PROCEDURES:

Sampling:

The sample of the present investigation was drawn randomly from non-working married male and female of Patna district rural area. The sample consists of 200 married male and female, 100 Non- working male and 100 non-working female.

Tool & Techniques used:

For the measurement of stress, „family stress inventory“ constructed and standardized by Dr. Abha Rani Bisht (Almora). The inventory is in Hindi.

Firstly, the scale of family stress questionnaire was distributed to male and female and then the answer books of that booklet were taken back from the male and female. After the both had completed the tasks. In this way the data was collected by permission of the respective head of the various families. The scoring of the responses of the male and female on these tests was done with the help of respective keys.

Statistical Techniques Employed:

For the purpose of arriving at meaningful result „t“ ratio and two ways analysis of variance was applied for the study of family stress among Non-Working married male and female

ANALYSIS AND INTERPRETATION OF DATA

Table 1, Table showing t-value between Non-working married male and female.

Category	N	M	S.D	SEM	SED m	t value
Male	28	381	81.115	15.61	18.21	.364
Female	48	387.625	64.296	9.3786		

Interpretation:

From the table 1, it has been defined that, t' value among Non- working married male and female come out to be .364, the said value is insignificant at 0.5 level. This indicated that Non working married male and female when compared on the basis of family stress, no significant difference was obtained.

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Source of variation	SS	df	Ms	F-ratio	significance
A	5046	2	2523	.31	Insignificant
B	19332	1	19332	2.43	Insignificant
A×B	1424	2	712	.08	Insignificant
Within	429483	54	7953.3888		

Interpretation:

Table 2 reveals that the value of F-ratio's has been found to be insignificant. It can be said that there is no significant difference between the male and female different levels of age of non-working married male and female between sex and age when studied separately on the scores of family stress.

Conclusions:

The following conclusions emerged out of Analysis of results:

1. There was no difference in family stress of non-working married male and female when studied separately.
2. There was no difference in family stress of Non- working married male and female when studied separately in relation to age.
3. There was no difference in family stress of non-working married male and female when studied separately under joint influence of sex and age.

Implications:

In the modern age, stress Management planning is a business, as we are now finding ourselves in the age of anxiety. It is undesirably a fact that one of the major functions for institutions is to develop the wholesome personality of the individual. Stress-Management is a precondition for a wholesome personality and achievements. A person having balanced personality is free from inhibition, inconstancies, emotional and nervous tensions, mental disorders and conflicts. It is true that stress has a great potentially for destruction, but it can also be constructive. If stress is perceived and managed poorly; it can lead to grief, disease and premature death. Family is the unit of society. It is the non-formal responsibility for child's full growth and development. Hence the families should be free from stress and strain because it is the family which helps the society in which they live psychologically stressed with both working and non-working parents as they have been the worst hit and the worst affected with almost no support or counseling from any agency. The present study has far reaching educational implications. The study in question highlight as to how and why stress prevails upon the non-working married male and female.

In the modern age, stress management planning is a big business as we are now finding ourselves in the age of anxiety. Stress has a no. of immediate effects and if the stresses are maintained, long-term behavioural, physical, emotional and cognitive affect individuals. Many people have

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developed way of coping with stress so that they are able to respond adaptively. One of the major functions of the healthy school climate is to develop wholesome personality of parents. A person having balanced personality is free from inhibitions, inconsistency financial stress and conflicts

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Conflict of Interests

The author declared no conflict of interests.

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A Comparative Study of the Adjustment among Secondary and Senior Secondary School Students of Almora District

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ABSTRACT

The present investigation compares the adjustment of secondary and senior secondary school Students in Almora district. Population contain all secondary and senior secondary school students of Almora district. 220 students were selected randomly from secondary schools of Almora district which contain both male and female students. Survey method was used to the present research. For this purpose of investigation “Adjustment Inventory” by A.K.P. Sinha and R.P. Singh was used. Adjustment inventory were distributed to 220 secondary school students (both male and female). Descriptive statistics were used. Means, standard deviation, values were calculated. t-test was used to find the significance of difference in adjustment among secondary school students and senior secondary school students at $p < 0.01$ and $p < 0.05$. The number of students who participated in the study were 220 including 45.46 % females and 54.55 % males. For the purpose of discussion and comparison participants were selected from twelve different categories such as boys (54.55 %), girls (45.46%), science students (47.706 %), art students (52.30 %), secondary school students (50%), senior secondary school students (50%), upper caste (52.27%), lower caste (47.72%), government school students (53.64%), and private school students (46.37%). Most of them are good adjustable. The analysis revealed that knowledge of adjustment and his factor’s (emotional, social and educational) may be used to identify well adjustment or maladjustment in our college, home and social environment. Comparison may profitably be used for this purpose.

Keywords: *Adjustment, Student, Secondary, School, Gender*

You may have heard someone say that “somebody just doesn’t adjust to situation” or “somebody facing problem in adjustment”. Adjustment is a necessary characteristic to be able to live peacefully in this world. Adjustment problem starts from the birth and continues till death,

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various situations arise at home, School, college, and workplace. Adjustment is the process of arriving at a balanced state between the need of individual and their satisfaction. Home and school play pivotal role in the adjustment of an individual. Adjustment is a popular expression used by people in day to day life. For example, while traveling in a - bus Or a train, we often hear or use this term; even when a guest comes to stay with us for a few days we have to adjust him/her in our house. Though sometimes we face problems in making these adjustments, they are important to maintain personal as well as social peace and harmony.

Adjustment in psychology, the behavioral process by which humans and other animals maintain an equilibrium among their various needs or between their needs and the obstacles of their environments. A sequence of adjustment begins when a need is felt and ends when it is satisfied. Hungry people, for example, are stimulated by their physiological state to seek food. When they eat, they reduce the stimulating condition that impelled them to activity, and they are thereby adjusted to this particular need. Though sometimes we face problems in making Emotional, Social & Educational adjustments. They are important to maintain personal as well as social peace and harmony. The learner adjusts actively in the school environment rather than passively adjusting to the school's program. Adjustment is essentially a process of re-learning. Although a variety of factors influence adjustments, directly or indirectly, many maladjustments are primarily the result of unfortunate learning experience. Adjustment can be viewed from two angles. Firstly, adjustment may be viewed as an achievement or how well a person handles his conflicts and overcomes the resulting tension. Secondly, adjustment may be looked upon as a process as to how a person adjusts or compromises to his conflicts. Thus adjustment maintains peace and harmony in home, school, and society and in the country. So Adjustment can be defined as a psychological process. The concept of adjustment initially was biological and it was termed as adaption.

According to the **Shaffer, L.S.** "Adjustment is the process by which living organism maintain a balance between his needs and the circumstances that influence the satisfactions of these needs. according to the **Carter V. Good** "adjustment is the process of finding and adopting modes of behaviour suitable to the environment or the change in the environment". Adjustment can be defined as a process of altering one's behaviour to reach a harmonious relationship with their environment. This is typically a response brought about by some type of change that has taken place. The stress of this change causes one to try to reach a new type of balance or homeostasis between the individual (both inwardly and outwardly), and with their environment. According to **Lazasus (1976)** at the psychological level, however adjustment has come to mean the individuals struggle to survive in or her surroundings. At the present study aimed to compare adjustment among secondary and senior secondary school students in almora district. Almora district is situated in state Uttarakhand. In the present study the adjustment of secondary and senior

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secondary level girls and boys and has tried to find out the differences on the pattern of adjustment on the basis of academic stream, gender, level, region, type of school, caste.

Statement of the problem:

“A comparative study of the adjustment among secondary and senior secondary school students of Almora district”.

Objective of the study:

The purpose of the present study to compare the total (Emotional, Social and Educational) adjustment of secondary and senior secondary school students on the basis of their gender, type of school, caste, level, academic stream and living place.

Delimitations of the study:

The problem is very vast & wide. Hence the investigator has delimited the problem as under:

1. The study were confined to Uttarakhand board students only.
2. The study were confined to secondary and senior secondary level students (class 9th onwards-10,11,12).
3. The area of present study were of limited to Almora district and six colleges were taken for sample.

METHOD

Survey method was used to research.

Population:

Population contained all secondary and senior secondary school students of Almora district .

Hypothesis:

1. There is no significant difference in adjustment (emotional, social and educational) of secondary and senior secondary level students on the basis of their living place.
2. There is no significant difference in adjustment (emotional, social and educational) of secondary and senior secondary level students on the basis of their gender.
3. There is no significant difference in adjustment (emotional, social and educational) of secondary and senior secondary level students on the basis of their academic stream.
4. There is no significant difference in adjustment (emotional, social and educational) of secondary and senior secondary level students on the basis of their type of school.
5. There is no significant difference in adjustment (emotional, social and educational) of secondary and senior secondary level students on the basis of their caste.
6. There is no significant difference in adjustment (emotional, social and educational) of secondary and senior secondary level students on the basis of their class level.

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Sample:

The present study was carried out on secondary and senior secondary school students of Almora District. Present study contain 110 secondary and 110 senior secondary school students out of which 120 were boys and 100 were girls.

Tool:

In the present investigation measure the Adjustment “Adjustment Inventory” for secondary and senior secondary school students made by A.K.P. Sinha and R.P. Singh was used. Adjustment Inventory for school students has been designed for Hindi medium students. The inventory seeks to segregate well adjusted secondary school students (age group 14 to 18 years) from poorly adjusted in three areas of adjustment viz. Emotional, Social and Educational. The adjustment inventory consists 60 items with yes /no response pattern. 20 were Emotional, 20 Social & 20 were Educational Adjustment items.

Administration and Procedure:

The boys and Girls who were studying in Secondary and senior Secondary School of different areas in Almora District, were randomly selected & A.K.P. Sinha and R.P. Singh “Adjustment Inventory” were distributed to 110 secondary and 110 senior Secondary school students and data was collected. The students were asked to respond to each item according to the response format provided in the questionnaire. In case of multiple choice questions, students were instructed to choose only one answer from provided list of options. The secondary and senior secondary school teachers received a full explanation of how to fill in the questionnaire. The participants were encouraged to approach the investigator whenever they needed clarification for any doubt. The obtain data from 220 students (both boys and girls) were analyzed with the help of mean, SD and t-test.

Statistical analysis:

Data were analyzed using excel programme. Descriptive statistics were used and t-value were calculated. t-test was used to find the significance of difference in study of adjustment among 110 secondary and 110 senior secondary school students at $p < 0.05$ and $p < 0.01$.

RESULTS

The number of students who participated in the study was 220 including boys (54.55 %), girls (45.46%), science students (47.706 %), art students (52.30 %), secondary school students (50%), senior secondary school students (50%), upper caste (52.27%), lower caste (47.72%), government school students (53.64%), and private school students (46.37%). Most of them are average adjusted. The data regarding adjustment were analyzed as follows:

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Table no. 1 Comparative study of adjustment among secondary and senior secondary school students on the basis of their living place

Category	Sample (N)	Mean (M)	Standard deviation(S.D.)	t-value	Significance Level
Rural	162	6.78	4.95	2.46	Significant at 0.05
Urban	58	5.54	2.21		

Df = 218, t-value is significant at 0.05 level

The above result table No.1 we can see that there was significant difference in adjustment (emotional, social and educational) among secondary and senior secondary school students of rural and urban areas at significance level 0.05. t-value indicates that urban students have better adjustment than rural students. Thus the null hypothesis, I which states “There is no significant difference in adjustment (emotional, social and educational) of secondary and senior secondary level students on the basis of their living place” was rejected. The main reason of this difference may be urban students have more facilities for education and they face problems by situations while in the rural areas students have less opportunity for education and other curriculum activities. Hence urban students were of higher adjusted than rural students.

Table no. 2 Comparative study of adjustment among secondary and senior secondary school students on the basis of their gender

Category	Sample (N)	Mean (M)	Standard deviation(S.D.)	t-value	Significance level
Girls	100	6.53	3.24	.50	non-significant at 0.05
Boys	120	7.04	8.58		

Df = 218, t-value is non-significant at 0.05 level

The above result table No.2 we can see that there was non-significant difference in adjustment (emotional, social and educational) among secondary and senior secondary school students of girls and boys at significance level 0.05. t-value indicates that boys and girls have same adjustment. Thus the null hypothesis, I which states “There is no significant difference in adjustment (emotional, social and educational) of secondary and senior secondary level students on the basis of their gender” was accepted. The main reason of this may be nowadays girls and boys are similarly participated in all field of education and life as co-curricular activities, tuitions, games, etc. So both girls and boys have same opportunity to Learn adjusting qualities.

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Table no. 3 Comparative study of adjustment among secondary and senior secondary school students on the basis of their academic stream

Category	Sample (N)	Mean (M)	Standard deviation(S.D.)	t-value	Significance Level
Art	57	6.25	3.29	.45	non- significant at 0.05
Science	52	6.99	6.21		

Df = 107, t-value is non-significant at 0.05 level

The above result table No.3 we can see that there was non-significant difference in adjustment (emotional, social and educational) among secondary and senior secondary school students of art stream and science stream at significance level 0.05. t-value indicates that art stream and science stream students have same adjustment. Thus the null hypothesis, I which states “There is no significant difference in adjustment (emotional, social and educational) of secondary and senior secondary level students on the basis of their academic stream” was accepted. The main reason of this difference may be that both stream students have same opportunity to learn anything in families, school, societies etc.

Table no. 4 Comparative study of adjustment among secondary and senior secondary school students on the basis of their type of school

Category	Sample (N)	Mean (M)	Standard deviation(S.D.)	t-value	Significance Level
Government	118	7.55	5.53	2.11	Significant at 0.05
Private	102	5.37	2.73		

Df = 218, t-value is significant at 0.05 level

The above result table No.4 we can see that there was significant difference in adjustment (emotional, social and educational) among secondary and senior secondary school students of government and private schools at significance level 0.05. t-value indicates that private school students have better adjustment than government schools students. Thus the null hypothesis, I which states “There is no significant difference in adjustment (emotional, social and educational) of secondary and senior secondary level students on the basis of their type of school” was rejected. The main reason of this difference may be that private schools attending his mind on students discipline, living skill, adjustment in societies and teacher staff are full.

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Table no. 5 Comparative study of adjustment among secondary and senior secondary school students on the basis of their caste

Category	Sample (N)	Mean (M)	Standard deviation(S.D.)	t-value	Significance level
Upper caste	115	7.27	5.26	3.07	Significant at 0.01
Lower caste	105	5.55	2.80		

Df = 218, t-value is significant at 0.01 level

The above result table No.5 we can see that there was significant difference in adjustment (emotional, social and educational) among secondary and senior secondary school students of upper caste and lower caste at significance level 0.01. t-value indicates that lower caste students have better adjustment than upper caste students. Thus the null hypothesis, I which states “There is no significant difference in adjustment (emotional, social and educational) of secondary and senior secondary level students on the basis of their caste” was rejected. The main reason of this difference may be that upper caste students growing up very fast and they participated in all subject or activities. Nowadays there is no differences between upper caste and lower caste in societies.

Table no. 6 Comparative study of adjustment among secondary and senior secondary school students on the basis of their class level

Category	Sample(N)	Mean (M)	Standard deviation(S.D.)	t-value	Significance level
Secondary	110	6.34	4.18	.53	Non -significant at 0.05
Senior secondary	110	6.66	4.85		

Df = 218, t-value is non-significant at 0.05 level

The above result table No.6 we can see that there was non-significant difference in adjustment (emotional, social and educational) among secondary and senior secondary school students at significance level 0.05. t-value indicates that secondary school students and senior secondary school students have same adjustment. Thus the null hypothesis, I which states “There is no significant difference in adjustment (emotional, social and educational) of secondary and senior secondary level students on the basis of their level” was accepted. The main reason of this difference may be secondary and senior secondary school students are of about same age group as adolescent and same thinking level.

DISCUSSION

In the present study, almost of the students were of good adjustment.(mean = 5 to 8) urban living students were better adjustable position than rural living students. Girls and boys were of same adjusted in total adjustment. Art stream students and science stream students were of same adjustment. Private school students were of better adjustable than government school students. Lower caste students were of better adjustable than upper caste students. Secondary school and senior secondary school students were of same adjustment. When the Mean scores for males, females, rural, urban, upper caste, lower caste, government school, private school, secondary, senior secondary, science and Art stream students were compared, it was observed that there existed a significant difference between the students of three branches(Emotional, Social & Educational) in terms of adjustment. The observed differences in the adjustment between males, females, rural, urban, upper caste, lower caste, government school, private school, secondary, senior secondary, science and Art stream students were partly due to differences in the living areas, societies, subject interest and partly due to the availability of resources. Above calculations shows that government school students were of least adjusted and private school students were of highest adjusted.

CONCLUSION

We can conclude by data analysis as follows:

1. There is significant difference in adjustment of secondary and senior secondary school students in relation to their living place.
2. There is no significant difference in adjustment of secondary and senior secondary school students in relation to their gender
3. There is no significant difference in adjustment of secondary and senior secondary school students in relation to their academic stream.
4. There is significant difference in adjustment of secondary and senior secondary school students in relation to their type of school.
5. There is significant difference in adjustment of secondary and senior secondary school students in relation to their caste.
6. There is no significant mean difference in emotional adjustment of secondary school students in relation to their class level.

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Conflict of Interests

The author declared no conflict of interests.

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Behavioral Interventions in Autism

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ABSTRACT

Childhood psychiatric disorders have increased over the last decades. Changing socio-cultural environmental conditions, better diagnostic techniques and increased sensitization among the masses and the health professionals are some of the most common reasons of this increased childhood psychiatric diagnoses. Autism spectrum disorders (ASD) are one of the most common disorders among children. It is a group of neurodevelopment disorders with specific delays and deviance in social, communicative and cognitive development. It includes autism, Asperger's syndrome, and pervasive developmental disorder- not otherwise specified (PDD-NOS). It is a lifelong developmental condition that affects the way an individual relates to his or her environment and their interaction with other people. In this paper, the term ASD and autism will be used interchangeably. It is often diagnosed between the age of two and five years. biopsychosocial model is used to explain the possible sources of origin of autism spectrum disorder. Medical, cognitive, behavioral, early intervention approaches are the most common models of interventions in autism. The current paper will specifically describe the various behavioral interventions commonly used in the management of autism.

Keywords: Autism, PDD, behavioral interventions, ASD

Autism and autistic spectrum disorders (ASDs) are life long neurodevelopment disorders affecting sociability and communication for which no etiology-based treatment has yet been developed. The word “spectrum” describes the range of difficulties that autistic people may experience and the degree to which they may be affected. The term autism spectrum disorders (ASDs) has been used to include the Diagnostic Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (DSM-IV-TR, 2000) diagnostic categories autistic disorder, Asperger disorder and pervasive developmental disorder- not otherwise specified. The main areas of difficulty are in social interaction, verbal and nonverbal communication and restricted or repetitive behaviors and interests. The word “autism” comes from the greek word “autos”,

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meaning “self.” the term describes conditions in which a person is removed from social interaction meaning an “isolated self”. Children with autism find it difficult to act in a way that other people think is “normal”. The term autism was coined by Bleuler in 1911. Freud equated autism with narcissism. In the beginning, autism was known as childhood schizophrenia. Leo Kanner described it in 1943. He found some children who found it difficult to relate to others, a failure to use language to convey meaning and an inordinate desire for the maintenance of the same.

ASDs are in the range of 6.5 to 6.6 per 1000 globally. Malhotra, Chakrabarti, Gupta, Kumar, and Gill (2003) estimate that out of 2942 cases registered at child and adolescent psychiatry clinic at PGIMER, Chandigarh, 1.6% met ICD 10 criteria of PDD. Out of these cases, 22 cases belong to ASD category. Bharat, Srinath, Sheshadri, and Girimaji (1997) reviewed in-patient data for one year data at child and adolescent psychiatry clinic NIMHANS, Bangalore and found that out of 143 registered cases, 6 belong to ASD.

As specified in DSM-IV-TR (American Psychiatric Association, 2000), autism spectrum disorders involve limitations in social relatedness, verbal and non-verbal communication and range of interests and behaviors. In the social domain, symptoms include impaired use of non-verbal behaviors (e.g., eye contact, facial expressions, gestures) to regulate social interactions, failure to develop age appropriate peer relationships, little seeking to share enjoyments and interests with other people and limited socio-emotional reciprocity. Communication deficits include delay in development of or absence of spoken language, difficulty in initiation and maintaining conversation; idiosyncratic or repetitive language and imitation pretend play deficits. In the behaviors and interests domain, there are often encompassing, unusual interests, inflexible adherence to non-functional routines, stereotypes body movement like hand flapping, flick fingers in front of eyes, tip toe walking and preoccupation with parts or sensory modalities of objects (American Psychiatric Association, 2000). Children with autism find it difficult to talk to other people and to look at other people. Often, they do not like being touched by other people. A person who has autism seems to be turned inwards. They may talk only to themselves, rock themselves backwards and forwards, and laugh at their own thoughts. They do not like any type of change and may find it very difficult to learn a new behavior like using a toilet or going to school.

To meet the criteria for autistic disorder, an individual must demonstrate 6 of the 12 symptoms, with at least 2 coming from the social domain and 1 each from the communication and restricted behaviors/interests categories. At least 1 symptom must have been present before 3 years. The onset of autism occurs before age 3, at two peak periods. The majority of children display developmental abnormalities within the first 2 years of life. Most individuals with autism improve with time and age. Symptoms particularly the repetitive and stereotypic behaviors

appear to increase for a few years after onset, usually peaking in the preschool period, but begin to level off or decline in the school-age years.

The ability of central coherence is weak in children with autism. It is the ability to build wholes out of parts. This means that people with autism focus more on details. They cannot build wholes out of them. Not being able to pay attention to wholes results in difficulties with perception and language. Therefore, children with autism usually need more time for dealing with information coming from their surroundings. As a consequence, they typically also need more time for responding. Impairment in central coherence is known as simultanagnosia. However, performance varies between people on the autism spectrum.

During the last few decades, however, the knowledge concerning the associated deficits of the disorder has rapidly expanded and many psychological, educational and medical interventions have been proposed, claiming to be effective. Children on the autism spectrum have impairment in executive function. Executive function refers to physical, emotional, and cognitive self-control. This includes planning actions, focusing, shifting attention, flexibility of behaviour and thinking and deficits in working memory. A smaller corpus callosum leads to abnormalities in working memory (an active process of keeping a memory until it is needed) and planning actions (Keary, Minshew, Bansal, Goradia, Fedorov, Keshavan, et al. (2009). Pisula (2010) argues that problems with executive function are probably caused by large networks in the brain. O'hearn, Asato, Ordaz., and Luna (2008) assert that grey matter and white matter irregularities have a negative influence on the way different brain regions work together (functional integration).

Autism and its co-morbidity

Autism can co-occur with a variety of other neurocognitive developmental disorders. Best appreciated is the high comorbidity rate of autism and mental retardation. Most studies have found that the majority of individuals with autism (75%) are intellectually handicapped, with roughly half of the group functioning in the range of mild to moderate mental retardation and half in the severe to profound range.

Another commonly associated condition with autism is seizures. Some children with autism suffer from seizures, with onset most often occurring during either the pre-school or adolescent years. Autism also seem to co-occur with Tourette syndrome () and other tic disorders. Attention Deficit Hyperactivity Disorder (ADHD) is yet another common co-morbid condition with autism.

Autism has been found to be more common among males than females with a ratio of 4:1. It is now accepted that autism occurs all socioeconomic levels, in all cultures and in all ethnic and racial groups.

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Genetic and psychological factors (Theory of Mind) both play an etiological role in the development of autism.

Psychological management of Autism

Before deciding the interventional strategies in the management of autism, it is always important to do through psychological assessment of a child. The psychological assessment of a child includes

- Level of intellectual ability
- Adaptive functioning specifically in the domain of self-help and social skills
- Specific assessment using autism scales and
- Behavioral problems

Autism like other neurocognitive developmental disorders is generally “not curable” and chronic management is required. The primary goals of treatment are to minimize the core features and associated deficits, maximize functional independence and quality of life and alleviate family distress. Facilitating development and learning, promoting socialization, reducing problem behaviors and psycho educating and supporting families can help accomplish these goals. Ideally, interventions should help mitigate the core features of autism like impairment in social reciprocity, deficits in communication, and restricted, repetitive behavioral repertoire. Behavioral strategies are the cornerstones and are most important and widely used in the management of autism. These interventions address

- social skills
- problem behaviors,
- daily-living skills,
- communication
- play and leisure skills
- academic achievement.

The whole objective is to make child’s functionally independent to the extent possible and teach life skills.

Behavioral interventions:

Behavioral interventions refer to those interventions where instrumental/Skinnerian based techniques form the predominant feature of the approach. Contemporary comprehensive behavioral curricula borrow from developmental or cognitive approaches such as addressing joint-attention, reciprocal imitation, symbolic play, perspective taking, self-management, social initiation, decreases problem behaviors and theory of mind and using indirect language stimulation and contingent imitation techniques and some developmental models e.g. Denver model and the structured teaching approach of the Treatment and Education of Autistic and Related Communication Handicapped Children (TEACCH, Schopler, 1984) program uses behavioral techniques to fulfill their curriculum goals. Behavioral techniques of reinforcement (mainly positive), backward chaining (i.e. the process of teaching each component of a behavior

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starting with the last step needed to complete the sequence), shaping, and prompt and prompt fading are used. Physical punishment is no longer used. Initially, food and favorite objects are used as reinforcers and are later replaced by more social ones such as praise. Learned responses are repeated until firmly embedded. Applied Behavioral Analysis (ABA) and discrete Trial Training have been the latest techniques introduced in the domain of behavioral treatment. Two or three hour sessions. short periods of structured time devoted to a task (3-5 minutes) followed by an equal amount of free play for the child (3-5 minutes). Longer break (10-15 minutes) at the end of every hour. Free play and breaks are used for incidental teaching or practicing learned skills in new environments. 35-40 hours per week. Breaking down skills into manageable pieces and then builds upon those skills so that a child learns how to learn in the natural environment.

Although programs may differ in philosophy and relative emphasis on particular strategies, they share many common goals and there is a growing consensus that important principles and components of effective early childhood intervention for children with autism include the following:

- entry into intervention as soon as autism diagnosis is seriously considered;
- provision of intensive intervention with active engagement of the child at least 25 hours per week, 12 months per year, in systematically planned, developmentally appropriate educational activities designed to address identified objectives;
- low child-to-professional ratio to allow sufficient amounts of 1-on-1 time and small-group instruction to meet specific individualized goals;
- incorporation of a high degree of structure through elements such as predictable routines, visual activity schedules and clear physical boundaries to minimize distractions;
- implementation of strategies to apply learned skills to new environments and situations (generalization) and to maintain functional use of these skills;

Specific Strategies

A variety of specific interventional techniques are used in psychological management programs for children with autism. These are aimed to teach social skills, reduce problem behaviors and enhance communication. These techniques are as follow:

Applied Behavior Analysis (ABA)

In the ABA approach the focus is on the use of rewards or reinforcements to encourage desirable behaviors and the reduction of problem behaviors by their positive consequences by means of different techniques like “time-out” “extinction” or withholding of child’s privileges following the undesirable problem. This was first used by an American psychologist Lovass in 1989 with autistic children to improve their social interaction and decrease maladaptive behaviors. A detail initial assessment is required to determine the level of functioning and specific behavioral difficulties. Careful observation is needed to identify the triggers of problem behavior and events that appear to maintain or encourage either positive or negative behaviors.

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ABA focuses on the reliable measurement and objective evaluation of observable behavior within relevant settings including the home, school, clinics and community.

Functional behavioral analysis or functional assessment is an important aspect of behaviorally based treatment of unwanted behaviors. Most problem behaviors serve as an adaptive function of some type and are reinforced by their consequences such as attainment of parent's attention, a desired object, activity or sensation or escape from undesirable situation or demand. Functional assessment is a rigorous, empirically based method of gathering information that can be used to maximize the effectiveness and efficacy of behavioral interventions.

It uses ABC model where "A" stands for antecedent conditions that initiate or trigger problem behavior like any situation, place, cues etc while "B" is the actual behavior displayed by the child like hitting, crying, banging the head, and finally "C" stands for the consequences following the child's behavior like parent's attention, cuddling the child etc. It is theorized that consequences following the child's behavior (B) is responsible either to maintain or decrease it. Following the ABC analysis, the frequency and intensity of the problem behaviors, their triggering and maintaining factors are identified. The parents are then primarily trained to modify their responses subsequent to the child's problem behavior if it is found that parent's behaviors are responsible for maintaining problem behaviors. Parents are also trained to give positive attention to desirable behaviors like child sitting quietly and trying to initiate in play activities so that these behaviors are strengthened.

The goal of ABA technique is to teach child

- Desirable behaviors
- Decreases undesirable behaviors
- Improve social and other new skills
- Imitation skills
- Preacademic skills and
- Self-help skills

Discrete Trial Training (DTT)

As a part of broader ABA intervention, discrete trials can be used to target numerous goals and objectives that children need to be explicitly taught. New skills are taught in a graduated step-by-step manner called discrete trial teaching. It is a behavioral and educational strategy based on the principles of ABA involving breaking skills down into smaller components and teaching those smaller sub-skills individually. Instructions are very clear, concise and repetitive. Repeated practice of the skills is conducted and professionals may incorporate prompting procedures. Correct responses are followed by reinforcement to facilitate learning. The basic rationale of discrete trial training is that children with autism typically do not learn from their surroundings spontaneously and hence often need to be explicitly taught virtually every thing they are expected to learn (Green, 1995). A discrete trial consists of 5 main parts for e.g.

1. An initial instruction e.g. "Nose your eyes."

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2. A prompt or cue given to help the child respond correctly e.g. professional points to the child's eyes.
3. A response given by the child e.g. a child touches his/her eyes.
4. A correct response by the child leads to getting reward like smiley stickers; verbal reward "nice job" designed to motivate the child to respond correctly again.
5. A pause between trials waiting 1-5 seconds before beginning the next trial.

In discrete trial training, simple skills are mastered before new learning opportunities are presented in which the child then builds upon the mastered skill toward a more complex one. Discrete trial training are used in the development of early skills like

- proper sitting (sit down, head quiet)
- directing attention
- compliance/following verbal instructions
- imitation of simple actions (gross motor, facial expressions, gestures)
- verbal imitation
- visual stimuli matching
- discrimination learning

There is a significant body of validated and peer-reviewed studies supporting the efficacy of DTT as a method to teach skills and improve and sustain socially significant behaviors in children with autism. Importantly, results reported include meaningful outcomes such as increased social and communication skills, self-help skills, functional skills, cognitive functions and academic performance. DTT has been criticized because of problems with generalizations of learned behaviors to spontaneous use in natural environments and because the highly structured teaching environment is not representative of natural adult-child interactions. Traditional ABA techniques have been modified to address these issues. It is to be remembered, however, that discrete trial training should be combined with other interventions to allow children to use skills in other settings and situations. Naturalistic behavioral interventions such as loosely structured training, incidental training, free operant structured training may enhance generalization of skills. These other behavioral methods based on ABA techniques are

1. **Loosely Structured Training:** It is used for situations when children with autism do not need the tightly controlled learning situations provided in DTT. In such training programs professionals select teaching material and tasks but follow a more flexible format than in DTT. For example, they set up a schedule presented in a pictorial format for children with autism to follow rather than giving instructions at each step. Also they may use modeling technique for the child to copy rather than demonstrating the skills themselves. This also involves behavioral skills training (BST) in which the professional/therapist gives an instructions, model an appropriate response, have individual rehearse this response and give

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feedback and reinforcement for the response. This can be used with a small group of children.

2. **Incidental Teaching Training:** In this, the professional/therapist sets up the environment that encourages the child to initiate the activities and instruction is given to her/him in the context of the activities the child has chosen. For e.g, the therapist may put toys in sight but out of reach and whenever the child attempts to gain access to one of the toys, the child is asked, “what do you want”? and require that the child name the toy in order to obtain access to it. It is assumed to improve communication and socio-cognitive skills.
3. **Free Operant Instruction Training:** In this training approach the therapist reinforce appropriate behavior and discourages problem behavior when occur, but environment is not systematically arranged or cues are not provided to the child. For e.g. if the therapist may aim to “ catch children being good” (e.g., praise children when they are playing quietly and appropriately with toys).

The effectiveness of ABA based interventions in the management of autism has been well documented through 5 decades of research by using single subject- methodology and in control studies of comprehensive early intensive behavioral interventions programs in structured and community settings. Children who receive early intensive behavioral treatment have been shown to make substantial, sustained gains in IQ, adaptive behavior, measures of social behavior, language and academic performance and yields a high degree of parental satisfaction and their outcomes have been significantly better than those of children in control groups.

CONCLUSION

Based upon the current findings, the most effective elements for an intervention are behavioral techniques and structured teaching based on visual cues. Multidisciplinary approach is the best line of intervention and finally, it is recommended that a comprehensive approach is favored with individualized treatment goals and programs involving parents and other professionals working with children with autism in a reciprocated manner.

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Conflict Of Interests

The Author Declared No Conflict Of Interests.

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Humour as coping and Flow as correlates of Subjective Happiness among Athletes and Non-athletes

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ABSTRACT

This study intends to find out if humour as coping and flow could significantly be different among athletes and non-athletes, and if the above mentioned variables show any kind of relationship with subjective happiness. A sample of 62 athletes and 75 non-athletes aged between 16 and 22 were selected for the study. Inventories were used to collect the data. It includes The Subjective Happiness Scale (SHS) by Lyubomirsky (1999), The Coping Humour Scale (CHS) developed by A. Martin (1983) and Flow State Scale by Jackson (1995). Demographic information including their age, gender, education level, and sporting involvement was also collected. The obtained results showed that Flow and humour are significantly higher for athletes than non-athletes. Flow and humour is also found to have a significant positive correlation with subjective happiness. Males are found to experience greater subjective happiness than females and they use more humour as coping. National level players experience more flow state than state level players. Second born children were found to be more happier than first born children. Thus within the limits and limitations of the present study results imply that engagements in athletic activities enhances humour coping and flow which contribute to better subjective happiness.

Keywords: *Flow, Humour, Happiness, Coping*

Sports is considered to be a way of learning how to live life, by overcoming its hardships, keeping commitments, showing courage, and to be co-operative within a team. It helps to handle the modern day life stressors with calmness and ease. Mastering a skill always build the confidence in one, to face challenges. Playing a game helps a person to understand his failures as setbacks and not shortcomings and deal with it effectively.

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Many factors affect the performance of an athlete. "Athletic performance is operationally defined as carrying out of specific physical routines or procedures by one who is trained or skilled in physical activity, influenced by a combination of physiological, psychological and socio-cultural factors ". Non-athletes are the ones who have never engaged in any kind of sport activity. Many studies have been conducted on how sports play a role in making an individual's life better.

Happiness is defined as "the predominance of the frequency of the occurrence of positive emotional experiences over negative ones and happiness is a significant indicator of the athlete's success (Tabeian, 2013). Mental happiness consists of emotional response, satisfaction and general judgment about life. The mood-boosting benefits of a good laugh is known to us. The researchers (Bains et.al. 2014) at California's found that the "humour group" performed significantly better when it came to memory recall. It was also found that the humour group showed considerably lower levels of cortisol (stress hormone) than the non-humour group's stress levels. The health benefits of laughter was considered by many other researches like (Buchowski, 2006) who estimated that just 10-15 minutes of laughter a day can burn up to 40 calories.

Meanwhile, a study by Miller (2009) found that sense of humour can protect against heart disease. Bains (2014) found that laughter increases quality of life in older adults. Laughter is also found to enhance wellbeing by reducing anxiety tension and depression (Seyle, 1974). Laughter releases neuropeptides like Endorphins and Enkephalins which are natural opiates and pain suppressing agents. The ability of laughter to release muscle tension and soothe the sympathetic nervous system also helps to control pain, as does increased circulation. Thus, laughter has a multi-pronged approach for the relief of pain in conditions such as arthritis, spondylitis, etc. Cousins (1976) in his article found that 10 minutes of laughter had an analgesic effect for 2 hours, in his personal problem of severe ankylosing spondylitis. Cogan et al (1987) demonstrated by clinical experiments that discomfort thresholds were higher in subjects after bouts of laughter.

Berk (1989) found that laughter may attenuate some stress-related hormones and modify Natural Killer Cell activity, resulting in immunomodulation. Labott (1987) also supports Berk's (1989) findings, and concludes that laughter results in improved immunity. In a study (Zuzanek, 2015) it was well documented that laughter increases the levels of immunoglobulin IgA and IgG. Cousins (1988) also states that laughter serves as a blocking agent against disease.

Sense of humour is conceptualized as a habitual behavioural pattern, an ability, a temperamental trait, an aesthetic response, an attitude, a world view, or a coping strategy. According to Freud, Humour allows one to maintain a detached perspective in the face of misfortune and adversity, thus sparing oneself of depression, anxiety, and a realistic view of oneself and the world. In the current psychology research, Humour is a broad and multi-faceted construct (Martin, 2000). But

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according to the contemporary view, humour can now be as both aggressive and hostile, as well as benevolent and philosophical (Ruch, 1996).

Flow is the experience of the timelessness and oneness with the activity in which one is engaged. In a flow state, people have a sense that their abilities are only just equal to the challenge that the project provides. Flow was studied specifically as a factor that may increase positive affect, reduce negative affect, and boost life satisfaction in later life. (Collins, 2009).

Research suggests that when athletes employ mindfulness in a competitive setting, focus on the present moment rather than the future has a positive effect on performance. The present study hypothesized that athletes who participated in a mindfulness training program would experience greater flow than they experienced previously. It was also predicted that mindfulness-trained athletes would experience greater flow than athletes in the control group. The cultivation of flow is seen as a performance-enhancing technique for athletes. This work offers additional insight into athletic training programs that strive to better performance and well-being. Results of the present study shed light on the effect of mindfulness training on athletes' flow experiences during competitive sport training. Both the significant increase in global flow scores and the sizeable increases in the flow dimensions of clear goals and sense of control support the effectiveness of the six-week mindfulness training intervention. Results offer promising evidence for sport psychology practitioners interested in improving flow among athletes.

Potential maladaptive behaviours related to flow was identified in the work of Partington & Oliver (2009). The relationship between transcendent experience, flow, and happiness are significantly positive. Furthermore, findings suggest that transcendent experience is an antecedent to flow, and flow positively affects happiness. Flow has demonstrated a mediating role between transcendent experience and happiness, where high levels of flow post-climb positively correlated with increased perception of happiness (Tsaur, Yen, & Hsiao, 2013).

High levels of flow are frequently found within discontinuous and abruptly changing environments. These findings are a novel addition to traditional linear flow models, as they suggest that employing different patterns of change (e.g. gradual, continuous, sudden, nonlinear) can complement linear relationships, enhancing employee happiness and well-being (Ceja & Navarro, 2012). A study by Asakawa (2004) found that increased flow experience led to increased positive affect (PA) while decreasing negative affect.

Need And Significance

The present study focuses on college athletes as its target group. The main reason for choosing them is because it is commonly seen that they are healthier, sociable, less stressed, happy and influential than their peer group. Our world needs a generation of such characteristics. If we focus on them and adopt their strategies, it will enhance the quality of life of non-athletes to a

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great extent. We will also be able to find out the areas of special attention that athletes need. It will influence many non-athletes to at least be involved in some physical activities on a daily basis. The time has come and is already here for an immediate intervention for a healthier tomorrow.

Aim

The present study aims to explore the relation between the variables flow, humour as coping and subjective happiness among athletes and non-athletes. This study also verifies whether men are happier than women, whether birth order is in anyway related to happiness and whether levels of athletic performance shows any difference in the experienced flow state in athletes.

METHOD

This part includes the way the research problem has been formulated and the procedures adopted to verify the problem. A sample of 62 athletes and 75 non-athletes aged between 16 and 24 were selected for the study. The sample selected were members of team events and they were selected from different districts. Some of them were national level players while others were state level players. These players have been playing for more than 5 years.

Inventories were used to collect the data which are *The Subjective Happiness Scale* (SHS) by Lyubomirsky (1999), *The Coping Humour Scale* (CHS) developed by R.A Martin (1996) and *Flow State Scale* by S.A Jackson (1996). SHS is a four-item scale, measuring global subjective happiness. All the scales were re-standardised locally and were found to have adequate reliability and validity.

SPSS version 16 was used for analysing the data. Pearson Correlation method was used to find the correlation between humour as coping and flow. Student 't' test was used to verify the significance of difference between the two groups with respect to gender and levels of performance.

RESULTS AND DISCUSSION

Through the present study the investigators tried to study the relation of flow state and humour as coping on subjective happiness among athletes and non-athletes and also whether men are happier than women, are second born happier than first born and whether there is any difference in the flow state experienced by state level athletes and national level athletes. The obtained data were scored and analysed to draw a meaningful inference. The found results are discussed in the following sessions.

Table 1: Difference between athletes and non-athletes in terms of happiness, humour as coping and flow state

	Group	N	Mean	Std. D	't' value
Happiness	Athletes	62	18.94	4.53	0.18
	Non-athletes	75	18.82	4.20	
Humour	Athletes	62	20.31	2.89	3.38**
	Non-athletes	75	18.68	3.87	
Flow	Athletes	62	141.78	18.49	7.55**
	Non-athletes	75	120.77	19.76	
** significance at 0.01 level					

Results of the present study indicate that flow and coping humour as significantly high among athletes than non-athletes. The higher flow rates among athletes indicate their mastery of the event and they have learned to experience flow in their own area of interest and could apply that to other areas of interest also. This is because one cannot enter flow state at will, it requires the knowledge to do that activity. Flow is a sense of that one's skills are adequate to cope with the challenges at hand in a goal directed, rule bound action system that provides clear clues as to how one is performing. Concentration is so intense that there is no attention left over to think about anything irrelevant or to worry about problems. Self-consciousness disappears, and the sense of time becomes distorted. An activity that produces such experiences is so gratifying that people are willing to do it for its own sake, with little concern for what they will get out of it, even when it is difficult or dangerous." (Csikzentmihalyi, 1990). It is also found that when in flow state people lose track of time and external concerns or stimuli, feels connected to someone greater than oneself, and feels challenged but not overwhelmed but not in terms of the ability and attention needed to complete a task. (Worthington, 2011). All these reasons substantiate the higher levels of performance.

From the findings of the present study it is clear that those who are involved in sports use more humour as coping in order to deal with stress. Collegiate athletes experience more stress since they are faced with meeting the academic demands of their institution as well as the practice and performance demands of their sport teams. As a result of this dual role of student and athlete, these individuals experience unique stressors related to extensive time demands, pressure to perform, managing relationships, and meeting academic expectations (Fletcher et al, 2003; Humphrey et al, 2000). Even thou we do not have many researches to support the potential health benefits of laughter, it is commonly seen and believed that the impact that laughter can create is very similar to that of physical exercise (Gervais and Wilson,2005).

Coping is seen as a shifting process in which one form of coping must be relied on more heavily at one time while another form of coping is needed at another time. The researchers that study

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relations between stress related hormones and humour have shown that laughter reduces at least four neuroendocrine hormones associated with stress response including epinephrine, cortisol, dopac and growth hormone (McGhee, 1999). Other studies like the one conducted by Pert (1999) supports the mind and body relation .This shows how the use of humour by athletes gives them the advantage over non-athletes. This enables them to have reduced stress hormone, which in turn helps them in improving their performance and experience better flow state. It improves the immune system, reduces both pain and blood pressure and it is an excellent source of cardiac exercise.

Table 2: Gender difference in the dimensions Happiness, Humour as coping and Flow state

	Gender	N	Mean	S. D	't'
Happiness	Males	79	20.20	3.55	4.89**
	Females	58	16.32	5.23	
Humour as coping	Males	79	20.74	2.74	2.41*
	Females	58	19.42	3.03	
Flow	Males	79	140.99	18.75	0.68
	Females	58	143.42	18.08	
*Significance at 0.05 level, ** significance at 0.01 level					

The above table shows that males experience significantly higher levels of happiness than females and they use more humour as coping mechanism. This contradicts the study by Pew Research Center (2003) where it was reported that women are happier than men (Conger, 2009).This might be due to the cultural setting in India. Women are not completely free to choose their career or to pursue their dreams. They lack economic independence and experience relationship problems, health issues, feelings of insecurity etc. which aggravate the situation. One of the major difference between males and females are in the way they handle problems. Men are more free and use more humour as a coping strategy. Therefore, even thou both genders face similar problems, men are successful not just in tackling it but in remaining happy as well.

Table 3: Relation between level of participation and the variables flow, humour as coping and subjective happiness.

	Level of participation	N	Mean	Std. Deviation	‘t’
Happiness	National	77	19.46	4.57	1.67
	State	46	18.06	4.38	
Humour as coping	National	77	20.29	3.15	0.09
	State	46	20.34	2.43	
Flow	National	77	145.86	14.82	3.79**
	State	46	134.96	21.92	
** significance at 0.01 level					

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The above table indicates that national level athletes experience significantly higher levels of flow states than state level athletes. Nakamura (1998) studied on why some students achieve more whereas others do not even when they have the same cognitive endowment. As mentioned before only those who master an event will be able to achieve the flow state. This is one of the reasons why National players experience more flow state than state players. National players who were selected for the study had participated in a number of competitions. Some of the girls practiced with players of opposite gender for 4.5 to 5.5 hours per day. This in turn prepared them to face any possible scenario. But the case of state players was different. They did not practice like the way National players did. The number of competitions they have participated was also less when compared to national level players. Another important factor of this study was that the national level players were strictly time bound and they were under very strict practice sessions. This must have enabled them to concentrate more on the game than on other activities. Most of them reported of visualising the game situation when they were alone. They believe that such imaginative experiences have enabled them to tackle even some of the obstacles they haven't experienced before, which in turn has resulted in better flow experience. This result is supported by the findings of Csikzentmihalyi and Larson (1984).

Table 4: Significance of difference in the variables subjective happiness, humour as coping and flow state with respect to birth order.

	Birth order	N	Mean	S. D	‘t’ value
Happiness	First born	63	18.01	4.89	2.48**
	last born	55	20.07	3.97	
Humour as coping	First born	63	20.15	2.70	0.74
	last born	55	20.54	2.95	
Flow	First born	63	140.95	18.06	0.38
	last born	55	142.15	19.74	
** significance at 0.01 level					

From the above table, results indicate that last born children are significantly happier than first born children. Daily Worth (2015) reports last born children are more contempt and happier. They are more sociable and better at team sports because of their position in the family. Ever since they are born they have a constant competition. This makes them work harder in order to stand out from the shadow of elder siblings. This is further supported by parkinson (2016). According to Schumann and Salmon (2011) last borns claims to be happier in relationships. This may be the reason why they experience more happiness.

Table 5: Pearson's Correlation between the variables subjective happiness, humour as coping and flow state. (N= 198)

variables		Happiness	Humour	Flow
Happiness	Pearson Correlation	1	.566**	.482**
**. Correlation is significant at the 0.01 level (2-tailed).				

The results indicate that subjective happiness has significant correlations with Humour as coping and flow. This indicates that as the person copes better and when he shows more involvement in the activity he is doing, he experiences more happiness. Researches show that the relation between coping and emotions are bi-directional (Folkman and Lazarus, 1988). Therefore, coping can bring about changes in environment relationships, which in turn leads to a different emotional state (Crocker and Graham, 1995). Therefore, if we focus on a task, it will enhance our knowledge on the improvement areas which will in turn influence our overall happiness. This will also improve our quality of life.

Table 6: Linear regression table predicting level of happiness from flow and humour as coping.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.545	2.350		1.934	.055
	Humour as coping	.429	.093	.312	4.609	.000
	Flow	.043	.015	.197	2.911	.004
Dependent Variable: Happiness (P≤ .01), R square- 0.17 and F value 19.93						

In order to test whether humour as coping and flow predicts happiness Baron and Kenny's (1986) linear regression method was used. It is found that flow state and coping humour significantly predicts 17 percentage of happiness among the sample. The number of stressors that one can face is many and the damages it can create is also very high. But not all individuals are affected with these stressors. Some individuals are successful in turning their difficulties into opportunities. This is because of the individual differences in the people's reaction to stress (Steiner, 2010). From the results of this study we have seen that athletes use more humor as coping and experience better flow state and that it is capable of predicting happiness. This is because one develops many positive qualities as a result of experiencing flow state (Hektner, 1996). Folkman and Lazarus (1988). Csikszentmihalyi and Hunter (2003) also reported similar findings.

CONCLUSION

The present study examined the relations between the variables humour as coping, subjective happiness and flow. It was found that flow state and humour as coping to stress as significantly higher for athletes than non-athletes. Males have higher levels of happiness than females and use humour as a coping mechanism. National level athletes experience more flow state than state level athletes which helps them to focus better and be better achievers. Last born are relatively happier than first born as they aim and achieve more than their elder ones. It was also seen that happiness has significant correlations with humour as Coping and flow state.

LIMITATIONS

As with all other studies, this study is also not free of limitations. We have not been able to identify whether the athletes that were chosen for the study were naturally pre disposed to better happiness, humour sense and flow state.

IMPLICATIONS

The awareness of the psychological components that enhances the optimal performance is crucial in applied sports psychology. Now that we know that flow state is a determining factor with relation to the level of participation, coaches must check whether the team members has acquired the required mastery level in their events in order to experience better flow state. Another implication of this study is that females must be taught to use more humour in order to deal with life's stress factors. Not only is this method a socially acceptable one but also more matured as well. Second born children must be given more preference while selecting members of team events as they have better socialising and influencing capacity. They have all the required leadership quality. Finally, every individual must be encouraged to be actively involved in physical activities as it will help them to boost their subjective happiness, humour sense and flow state.

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Conflict of Interests

The author declared no conflict of interests.

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Quality Of Life and Depression among Patients with Type I Diabetes: A Study of Gender Differences

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ABSTRACT

Diabetes is a progressive chronic condition which places a significant burden of self management on the individual, such as daily monitoring and medications management, worry about the future and distress about the impact of diabetes on various aspects of life. It is a group of metabolic diseases characterized by elevated blood glucose levels (hyperglycemia) resulting from defects in insulin secretion, insulin action or both. The present study aimed to assess gender differences in quality of life and depression in patients suffering from type I diabetes. A sample of 70 participants (44 male and 26 female) in the age range of 40-80 years was collected from Jammu region, India. WHO Quality of life questionnaire and Beck's Depression inventory-II were used as tools. Results indicated a significant difference on physical and psychological dimensions of quality of life and on depression across gender. The mean scores indicated that female participants had increased level of depression compared to the male participants. No significant difference was found between male and female on social and environmental dimensions of quality of life.

Keywords: *Depression, Diabetes, Gender, Quality of life.*

Diabetes mellitus is a chronic medical condition that places serious limitations on an individual's daily-life activities. Earlier known to be insulin-dependent diabetes mellitus (IDDM) or juvenile-onset diabetes, it develops when the body's immune system destroys pancreatic beta cells, the only cells in the body that make the hormone insulin that regulates blood glucose. To survive, people with Type I diabetes must have insulin delivered by injection or a pump. This form of diabetes usually strikes children and young adults, although disease onset can occur at any age. In adults, Type I diabetes accounts for approximately 5% of all diagnosed cases of diabetes. Risk factors for Type I diabetes may be autoimmune, genetic, or environmental. There

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Quality Of Life and Depression among Patients with Type I Diabetes: A Study of Gender Differences

is no known way to prevent Type I diabetes and several clinical trials for preventing Type I diabetes are currently in progress or are being planned (Centers for Disease Control and Prevention, 2011).

Prevalence of diabetes in adults worldwide was estimated to be 4.0% in 1995 and to rise to 5.4% by the year 2025. Nearly 75% of people with diabetes will reside in developing countries by 2025, as compared with 62% in 1995. The countries with the largest number of people with diabetes are, and will be, India, China, and the U.S. In developing countries, the majority of people with diabetes are in the age range of 45-64 years (King, Aubert, & Herman, 1998). The World Health Organization estimated that the number of people with diabetes in the world would reach 300 million by 2025 (WHO REPORT, 2007).

Diabetes may give rise to many complications, such as, heart and blood vessel disease, nerve damage (neuropathy), kidney damage (nephropathy), eye damage, foot damage, skin and mouth conditions and pregnancy complications. There is a need for proper education and behavior change. Because of this, diabetes mellitus is an illness for considering effects on quality of life. There has been a growing interest in examining health related quality of life in both patients with Type I and Type II diabetes (Jacobson, de Groot, & Samson, 1994). Type I diabetes has a greater impact on the quality of life of women as compared to men as women experience more worries about complications of Type I diabetes and hypoglycaemia (Gafvels, Lithner & Borjeson, 1993). Type I diabetes has a greater negative impact on quality of life as compared to Type II diabetes. (Mayou, Bryant, & Turner, 1990). Such patients are also at a higher risk for developing psychiatric problems such as anxiety and depression (Barrett, Barrett, Oxman & Gerber, 1988). It is associated with an increased prevalence of mental health difficulties, including anxiety and depression from childhood into older age (Peyrot & Rubin, 1997; Shaban, Fosbury, Kerr, & Cavan, 2006). Otherwise there exists very less information regarding the psychological distress in young adults suffering from type I diabetes (Kovacs, Goldston, Obrosky, & Bonar, 1997).

It is important to study gender differences in diabetes because many studies indicate that men and women have different attitudes and behaviors related to diabetes care (Hibbard & Pope, 1983). Females are more sensitive to illnesses and more willing to seek medical advice that often require additional, intrusive treatments. Women have a greater interest and concern for diabetes and are more likely to perceive symptoms (Anderson, Fitzgerald, & Oh, 1993). Women make greater use of diabetes services and have a larger network of people with whom to discuss medical problems (Green, 1990). Some of these differences may have evolved from the different roles that men and women traditionally have played within the family structure, with women having greater responsibilities for family health.

Previous work on adolescents suffering from Type I diabetes suggests that female adolescents are more likely to have poorer metabolic control than male adolescents, which may be related to

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the hormonal changes during puberty (Amiel, Sherwin, Simonson, Lauritano & Tamborlane, 1986) and poorer adherence to treatment and lifestyle recommendations (Cameron, 2003; Nurick & Johnson, 1991). Obesity has a greater effect on well-being in women suffering from type I diabetes (Zabelina, Erikson, kolotkin & Crosby, 2009).

The causal factors of depression in diabetes are not fully understood. Both biological and psychosocial factors are likely to play a role (Barnard, Skinner & Peveler, 2006). Depression is very common in diabetic patients with comorbidity (de Groot, Anderson, Freedland, Clouse & Lustman, 2001) and high levels of diabetes-related distress (Pouwer et al. 2005). Patients with psychiatric disorders, particularly depression tend to have poorer glucose regulation than did patients who had no psychiatric diagnosis (Lustman & Clouse, 2002; Sridhar, 2007).

Health status assessment and diabetes-specific quality of life (QOL) is important because individuals with diabetes often have to cope with a variety of advice, recommendations and medications which may be burdensome. These interventions improve glucose levels although pharmacological treatment might not improve health status or diabetes-related quality of life, and may even reduce them. The studies examining the relations between glucose and quality of life in patients with established diabetes are very inconsistent: some support the relation of glycaemic control with improved quality of life while others do not (Goddijn, Bilo, Feskens, Groeniert, Vander, & Meyboom-de, 1999). People having diabetes display poorer general emotional wellbeing than the healthy population, including impaired quality of life (Goldney, Phillips, Fisher, & Wilson, 2004), and more symptoms of depression (Ali, Stone & Peters; Anderson, Freedland, Clouse, & Lustman, 2001).

Type I diabetes requires patient to follow a strict and expensive daily regimen of regular blood glucose testing, life-style and dietary adjustment, and insulin injections. By following this regimen, blood glucose levels may be optimized, general well being can be maintained, and the risk of developing the long-term complications of diabetes will be reduced (Lloyd & Orchard, 1993; DCCT, 1993). However, past studies have not extensively addressed the contribution of medical illness severity to psychiatric illnesses and quality of life. In this paper, we examine this issue in a sample of patients suffering from Type I diabetes and propose the following objectives-(1) Males will score higher on quality of life than females. (2) Females will score higher on depression than males.

METHOD

Participants

The present study comprised of 70 participants (44 male and 26 female) in the age range of 40-80 years. The sample was collected from endocrinology clinics of Jammu city, India. The data was collected over a period of 1 month.

Measures

Depression: To assess the depression level of participants Beck Depression Inventory-II (Beck, Steer and Brown in 1996) was administered. It is a self report inventory which is used to assess the depression level of subjects. It contains 21 items; with four response categories from 0 to 3 respectively. Response options vary for all the items. Higher total scores indicate more severe depressive symptoms. This test has high test-retest reliability (Pearson $r=0.93$), as well as high internal consistency of 0.91.

Quality of Life: The World Health Organization -Quality of Life-BREF is a 26 item short version of the 100 item WHOQOL scale, developed with the aim of creating a cross cultural quality of life assessment instrument. The items of this instrument factorize into four domains of quality of life, denoted by 'physical health', 'psychological', 'social relationships' and 'environment'. Validity was demonstrated in a study by the WHO-QOL Group, which found that WHO-QOL-BREF domains were representative and relevant for quality of life across several cultures. The WHOQOL group found cronbach's alpha values ranging from 0.66 to 0.84 for the four domains (WHOQOL Group, 1998).

Procedure

Data was collected individually using a cross-sectional design. Care was taken that doubling of data does not take place. Consent was taken from the doctors of various clinics and each participant's consent was also sought.

Statistical Method

Coding of the one categorical variable i.e. gender was carried out by using SPSS version 20. Mean, standard deviation and the t-test were calculated. The variables tested were depression and quality of life.

RESULTS

Mean, standard deviations and the value of t are presented in the table. Results indicated significant gender difference for psychological (2.382, $p < 0.05$) and physical domains (3.391, $p < 0.01$) of quality of life. Significant gender differences are also present in depression (2.381, $p < 0.05$). However no gender differences were found for the social and environmental domains of quality of life.

DISCUSSION

The aim of the present study was to assess the gender differences in quality of life and depression in the patients with type I diabetes. The participants were in the age range of 40-80 years. The main finding was that there was a gender difference between males and females on psychological and physical domains of quality of life whereas there was no gender difference

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found on social and environmental domains of quality of life. Mean scores indicated that the females showed more psychological and physical health problems as compared to males.

Although several studies have examined determinants of health related quality of life in adolescents and young adults with type1 diabetes (Faulkner, 2003) only a few studies have examined the determinants of health related quality of life and quality of life in adults with Type I diabetes. One study that examined 397 adults with T1D, reported that female gender, lower income, longer diabetes duration, diabetes complications, experiencing more than one episode of hypoglycemia per month, and low physical activity levels were associated with poor HRQL (Lloyd & Orchard, 1999). Another study found female gender, obesity, diabetes complication and comorbidities were associated with lower HRQL, among 784 T1D adults (Coffey et al.,2002). Women appear to experience a greater impact of diabetes on their quality of life and experience more worries about complications and hypoglycemia than men (Eiser, Flynn, & Green, 1999).

The second main finding was that there was a gender difference found on depression. Mean scores indicated that the female participants had higher scores on depression than male participants. The reason could be the hormonal changes, relational violence against women and the role of genes. Results of the psychiatric interviews (CIDI) showed that 8–10% of male and female patients with T1DM suffered from a depressive disorder (MDD/ dysthymia). Among patients with T2DM, 18% of women had MDD and 6% dysthymia, while the percentage of men with any depressive disorder was surprisingly low (2%; Pouwer et al., 2009). Over one-third of young adults with Type I diabetes experience considerable psychological distress, including symptoms of depression. The results suggest that there is an increased prevalence of clinically relevant anxiety in females and of depression in males with Type I diabetes when compared with the normative data (Shaban, Fosbury, Kerr, & Cavan, 2006).

The reason could be that females show more predominant emotions, such as, frustration, irritability, and guilt. They often experience negative feelings, such as, blue mood, despair, and anxiety and have less time to enjoy leisure activities as they remain more busy in house chores. They get less time to take care of themselves. In regard to physical health, the reason could be that their general health gets more affected to specific problem. Females feel more drained and fatigued. They don't indulge in physical activities such as exercise and gym. They are more dependent on others because of social pressures and cultural restraints. As they are socially more isolated than males they share less of their problems. By considering the four domains, quality of life is better in males suffering from Type I diabetes as compared to female patients.

LIMITATIONS

The major limitation was the use of cross-sectional design. The present sample was unequal hence it was not representative of the whole population.

CONCLUSION

Depression is a very common psychiatric problem in both males and females suffering from Type I diabetes. All patients with diabetes and depression require adequate mental healthcare, for which screening and monitoring should be advocated. Health practitioners should be encouraged to achieve good glycaemic and cardiovascular risk factor control, and promote lifestyle interventions to improve quality of life in this population. Additional support should be provided for socioeconomically disadvantaged adults. Gender specific interventions targeting at-risk women should be implemented. Self-management education or training is a key step in improving health outcomes and quality of life. It focuses on self-care behaviors, such as healthy eating, being active, and monitoring blood sugar. It is a collaborative process in which diabetes educators help people with or at risk for diabetes gain the knowledge and problem-solving and coping skills needed to successfully self-manage the disease and its related condition.

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Conflict of Interests

The author declared no conflict of interests.

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Table 1, Test of significant differences on Physical and Psychological domains of QOL and in depression across males and females

	Mean			SD		t-test
	Male	Female		Male	Female	
Social	10.18	10.11		2.47	1.92	.118
Psychological	20.63	18.30		4.01	3.84	2.382*
Physical	23.38	19.96		4.36	3.58	3.391**
Environmental	26.56	24.50		5.19	5.73	1.549
Depression	14.36	19.76		9.57	8.43	2.381*

* $p < 0.05$

** $p < 0.01$

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Greetings: Their Genesis and Cultural Significance in a Civilised Society

Akhilesh Pathak^{1*}

ABSTRACT

Social interaction forms the unit of social analysis since the turn of sociological analysis from positivism to interpretive sociology. Most interactions begin with a light form called greetings. While there are more serious interactions that take into account the questions of one's social and historical position in society, greetings are rather less immersed in such considerations. That does not mean that greetings do not involve elements of hierarchy and other cultural norms. The whole idea of manners within civilisation as expounded by Norbert Elias seems to be coded around norms of interaction based on the particular position one holds within the cultural setting. Styles of greetings not just depend on social status; in fact they are also determined by the time of the day and occasion. Thus this paper is an attempt to scrutinise various nuances of greetings in human civilisation.

Keywords: *Greetings, Civilization, Manners, Sublimation, Reciprocity.*

The *Gayatri Mantra* greets in reverence the ultimate source of energy, the very basis of all life on earth, the Sun. It carries two parts – one, an acknowledgment of the indispensability of the Sun to human existence and an offering in the form of a prayer so that the bounty of nature lends itself for human use in the time to come. There are millions of such songs and psalms in almost every culture that greet the Sun, the moon and other heavenly bodies in order to generate a feeling of unison with the cosmos. The list of prayers and offerings that feature among the 'yajnas' and other forms of rituals mentioned in the *Yajur Veda* are a form of greeting the divine spirit. It signifies a special union of both materialism and spiritualism. On the one hand, the sacrifices one makes in the forms of clarified butter and other objects show us the role of materialism that is attached with religious rituals whereas, on the other hand, the very recital of 'mantras' and psalms show us the spiritual side of it wherein one seeks to pay one's obeisance to the spirits one would like to keep gratified.

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Marcel Mauss in his study of sacrifice in the primitive societies explains the significance of the '*sacrifier*', the '*sacrificer*' and the *object of sacrifice* (Hubert & Mauss, 1898). He defined sacrifice in the following words: "Sacrifice is a religious act which, through the consecration of a victim, modifies the condition of the moral person who accomplishes it or that of certain objects with which he is concerned" (Hubert & Mauss, 1898). The idea that sacrifice would bring bounty to one's life emerged from man's belief in spirit and the practice of either 'naturism' or 'animism'. It was this belief in the supernatural that Edward Tylor (1871) considers to be the basis of religion. It is through religion that morals have been built for thousands of years. The authority of the Church seemed to be unchallenged until the Hussites under John Huss challenged it in the 14th and the 15th century Europe. Every act of greeting is a form of sacrificial offering. A part of one's own self-image seems to undergo a change - both positively as well as negatively every time one greets another person. All forms of greetings can be classified on a hierarchical scale. One higher on the ladder would greet another lying lower on the ladder in a more informal sense whereas it becomes more formal when it's the other way round.

John Dewey utilised his concept of 'experimental logic' to explain that the human mind is a process and has the ability to adapt to the environment based on the given situation. Thus, mind is not a structure; rather it's a process according to Dewey.² He used the concept of *deliberation* to explain the process. He explains deliberation in the following terms: "Deliberation is a dramatic rehearsal (in imagination) of various competing possible lines of action...Deliberation is an experiment in finding out what the various lines of possible action are really like. It is an experiment in making various combinations of selected elements...to see what the resultant action would be like if it were entered upon" (Dewey, 1922). It was the ability of human beings to objectify them that gave rise to the concept of self. It is this idea that Mead took forward to theorise on the interplay between mind, self and society wherein humans act based on their consideration of the 'generalised other'. All such actions do take care of the wider norms of the society. The question to be asked is 'why'. Adherence to the normative structure of the society is considered rational as it provides every social action with the proper meaning in the Weberian sense. Max Weber distinguishes between '*formal*' and '*substantive*' rationality. In his own words, "The terms "formal rationality of economic action" will be used to designate the extent of quantitative calculation or accounting which is technically possible and which is actually applied" (Weber, 1978). He goes on to argue, "The concept of substantive rationality, on the other hand, is full of ambiguities" (Weber, 1978). He further elaborates on the concept and states that substantive rationality applies "certain criteria of ultimate ends, whether they be ethical, political, utilitarian, hedonistic, feudal (*standisch*), egalitarian, or whatever, and measure the results of the economic action, however formally rational in the sense of correct calculation they

² John Dewey came up with the concept in his earlier work *Psychology* (New York: Harper & Row, 1886). He elaborated upon the concept of *deliberation* in *Human Nature and Human Conduct* (New York: Henry Holt, 1922).

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may be, against these scale of “value rationality” or “substantive goal rationality”.” (Weber, 1978). Rationality explained in these terms probably guides most of our actions than the strictly formal and calculated economic actions.

A leaf must be taken from Kant's explanation of Practical Reason. He asserted: “To be happy is necessarily the wish of every finite rational being, and this, therefore, is inevitably a determining principle of its faculty of desire” (Kant, 1787).³ Thus, it can be said that whatever we do we seek happiness as the ultimate end. Schopenhauer explains it as the “will to survive” (Schopenhauer, 1818). In his opinion, self-preservation is one of the highest virtues to possess. It's a matter of common experience that nobody teaches the animals and birds to avoid dangers in order to survive. Properties such as 'camouflage' helps animals to survive in an environment wherein by virtue of being conspicuous one runs the risk of falling an easy prey to predators. Even the plants grow in a particular direction and avoid spreading their branches in directions where there are hindrances to the growth taken as potential risk to their very existence. Hence, it can be argued that human actions are seldom guided by motives of self-destruction.

Future-orientation is the other quality that we all possess. It lies at the root of our proclivity towards holding expectations. The perception of time that we have arises from our experience of succession of events coupled with our ability to perceive change. Were it not for the ability to differentiate between events in successive phases of time, we would not have formed the notions of past, present and future. Interestingly, all our images of the future are coloured by our experience of the past. “Pictures of reality”⁴ we observe in the past shape our expectations for the future. Similar actions leading to favourable results on multiple occasions stand to be rationalised. This is what leads us to greet others as a token of goodwill. Every such gesture carries it with an expression of current goodwill towards the person and an expectation of the same goodwill to be returned. A parallel must be drawn with Mauss's idea of reciprocity expounded in his classic work, *The Gift* with regard to all such exchanges.

Language is inevitable to culture. It is language through which an entire culture is expressed. Habermas (1984) accords it primacy in the modern sense of the communicative processes that go into construction of rationality. Every social interaction is rendered possible by the fact that the members sharing a common life world (*lebenswelt*) interact with the help of a common language which is a combination of background knowledge and an assumed understanding of the particular situation of interaction based on the current knowledge that the participating actors possess. Greetings are also embedded within a life world. A set of shared meanings expressed through both language and gestures form a variety of ways of greeting each other. Ferdinand de

³ Immanuel Kant explains it through the concept of freedom in his seminal work, *The Critique of Practical Reason* published in 1787.

⁴ Ludwig Wittgenstein explained the concept in *Tractatus Logico-Philosophicus* published in 1921.

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Saussure (1915) explains the relationship between 'signifier' and 'signified', signifier being the sound-image that is actually uttered during a speech act while the 'signified' is the concept that the signifier points to in order to create a science of language. Every act of greeting necessarily has both these concepts embedded within it.

The most common forms of greetings such as 'Good Morning', 'Good Evening' and 'Good Night' are a combination of two words with one signifying an idea that is favourable to human existence and brings a pacifying effect to the nerves, the other carries with it a dimension of time. As has already been said, human life is a function of time, on this occasion it is mostly biological in sense. Radha Kamal Mukherjee (1943) explained it quite succinctly through his theory on the notion of time which he classified as astronomical, biological and social. Gravitation could be said to be the cause of such ways of greeting among human beings. The categories, night, afternoon, evening and night are different states within a time period in which the earth completes one full rotation on its own axis. A very significant role is played by the growth of modern capitalism and the concept of free labour that commodifies labour with labour expressed as an equivalent magnitude of time. The labour is expected to work for a stipulated period of time on a daily basis that gives to him a special meaning with regard to the understanding of time. The normal measurement in terms of hours actually plays an important part in setting the biological clock for those involved in the process of production. The designation of the various parts of the day as morning, afternoon and evening has given birth to the most popular terms used as greeting each other. Frederick Taylor's idea of managing workers in a completely mathematical-mechanical sense has guided the norms about shop floor interactions for over a century now. Besides these, there are other forms of greetings that revolve around earth's revolution in its orbit around the sun. Greetings such as 'Happy Birthday' and 'Happy New Year' signify time in a different sense. Annual observances perceive time socially.

The cultural significance of the calendar goes a long way to show how people remain attached to festivals and observances. It gives them a sense of commonality, a sense of belonging to one culture. The number of holidays on a particular calendar tells us the number of occasions on which a particular community celebrates its feeling of solidarity. Greetings such as 'Eid Mubarak' and 'Merry Christmas' are mostly the first words to be uttered by all and sundry on the days on which these festivals occur. These terms carry a social perception of time encircling a religious occasion. Durkheim asserted that "religion is eminently social" (Durkheim, 1912). Leaving aside the dogmatic theological doctrines and the age-old debate on the existence of God, religion acts like a cementing substance that keeps the society together. It is this togetherness that gets reflected in the greetings that people exchange on these occasions.

The History of Manners

Norbert Elias (1939) traced the history of manners and the causes of the genesis of the set of etiquette that the medieval Europe has known since Renaissance. He focused on the structural

changes in the state-formation with an emphasis on the realm of the cultural. He, without rejecting Marxism completely, differed from the Marxist idea of 'economic determinism'. To him, it was the patterns of social interactions that determined the culture rather than economic considerations. He accepts the impact on the change in human ways of interactions in the sixteenth and seventeenth century Europe on account of the rise of capitalism with imperialism as one of its offshoots. There was a need to pacify one's own territory and keep one's own domestic population satisfied. This tendency on the part of the rulers led people to recognise a new sense of personal security and violence of all kinds in the domestic sphere came to be regarded as something utterly despicable. Gone were the days when warrior qualities were one of the most revered ones and the warriors had personal weapons to protect themselves. A horde of virtues encircled one's actions in public. St. Augustine coined the famous dictum, "God is good" which more often than not stands to be read as "good is God". Whatever is good is virtuous and violence certainly fell out of the sphere of the good.

Georg Lukacs describes the modern society engulfed within a process of reification based on the commodification of the world as explained by Marx. Marx defines reification as "'A commodity is therefore a mysterious thing, simply because in it the social character of men's labour appears to them as an objective character stamped upon the product of that labour; because the relation of the producers to the sum total of their own labour is presented to them as a social relation existing not between themselves, but between the products of their labour. This is the reason the products of labour become commodities, social things whose qualities are at the same time perceptible and imperceptible by the senses ... It is only a definite social relation between men that assumes, in their eyes, the fantastic form of a relation between things.'" (as quoted in Lukacs, 1968).⁵ Looking at the world from a structural point of view, reification appears to be a reality which slowly took its nineteenth-century form through the structural changes that took place in the medieval Europe. Under the veil of managing domestic affairs, the rulers actually appropriated a lot of freedoms of the people and monopolised the state power. The contractualists apologetically centre upon the fact that no matter how reified their lives became, it was the men themselves who gave their rulers the power over their own life and liberty. Elias traced the beginning of absolute monarchy to the eleventh century Europe but it was not concretised until the Italian Renaissance and the emergence of "court rationality" in France. The discovery of precious metals in Latin America marked the beginning of a competitive aggrandisement of their kingdoms by the countries of Western Europe and the Iberian Peninsula. France, England and Germany ventured to spread their territories with an interesting policy of domestic pacification and external belligerence pursued by all these imperial powers. In the ensuing "elimination struggles", the state tried to establish a civilising process that downplayed

⁵ Lukacs explained the concept of reification through a combination of both Marxian as well as Weberian analysis of the society in his *History and Class Consciousness*, 1968, first published in German in 1921.

the notion of violence. Pleasurable killing was discouraged and public display of cruelty became a deplorable act. Public duelling was no longer seen as either an act of valour or a matter of comic relief.

However, this civilising process was Janus-faced. Violence against the members of one's own country was sought to be prevented whereas violence against those from a different land was valorised. Somehow the process of internal pacification resulted in organised violence. Goudsblom sums it up in the following words: "Organised violence is generally far more effective than unorganised violence. To be effective, however, it requires a high degree of internal pacification. Those who participate in exercising it must not fight each other". (Goudsblom, 2001).⁶ Hence, it was a regulation of violence that set on roll the civilising process. The question that puzzled Elias was: "How did the extremely decentralised society of the early Middle Ages, in which numerous greater and smaller warriors were the real rulers of Western society, became one of the internally more or less pacified but outwardly embattled societies that we call states?" (Elias, 1978). The answer, according to Elias, lay in two things – the centralisation of political power and the rights of taxation. It was the power to appropriate monetary payment that helped organise wars for the conquest of newer territories.

The process of civilising human conduct was based on an increase in interconnectedness and greater application of self-restraints. A process of internalisation of certain self-restraints that defined new threshold of shame and embarrassment was set in. With the progress of every generation of human beings, there were external constraints (*Fremdzwange*) that gave rise to internal constraints (*Selbstzwange*). The court society of France set a trend of controlled gestures and manner that became typical of the times. The style and manners of Paris took the form of "the civilised conduct" which led to the "transformation of the structure of mental and emotional life" (Elias, 1978). The nobility that was composed of warriors seemed to operate with autonomy before the era of absolutism in France. Once the state became absolute, the territorial lord kept an eye on the nobility that was required to moderate its conduct, speech and gestures owing to the fact that there was "unwarlike administrative and clerical work that (had) to be done to promote effective government" (Elias, 1978).

The process that led to the refinement of manners and conduct also introduced a sharp difference between the upper and the lower strata of classes. The concept of social stratification clearly seems to have crept in the new forms of civilised conduct. Mauss and Durkheim (1963) in their *Primitive Classification* explain how natural inequality discerned in the nature gets translated into social inequality. They argue that the human mind at birth is not already programmed to classify objects around it. It learns it over a period of time through an experience of the various

⁶ Johan Goudsblom in *Stof waar honger uit ontstond : over evolutie en sociale processen* (Amsterdam, Meulenhoff, 2001). p.104.

classes of things as they present themselves before it. They explain: “A class is a group of things; and things do not present themselves to observation grouped in such a way. We may well perceive, more or less vaguely, their resemblances” (Durkheim & Mauss, 1963). They uphold the concept of hierarchy as an integral part of classification when they write, “Every classification implies a hierarchical order for which neither the tangible world nor our mind gives us the model” (Durkheim & Mauss, 1963). According to them, this model is found in the society itself. The various relations of kinship and family provide us with the notion of classification and hierarchy. It is this hierarchy that stood represented in the civilising process as well. The manners of the lower classes were seen with contempt. Thus, “everything reminiscent of lower classes, everything vulgar, was kept at a distance” (Elias, 1978). A clear line was drawn between the manners of the nobility and the manners of the lower classes. The distinction between the plebeians and the commoners, the masters and the slaves in the feudal society, Marx would argue was based on material reasons, but it took a cultural flavour once the civilising process gained momentum in Europe. For the first time, a system of stratification assumed a psychological turn. It was not just a matter of interest for the historian to dig out points of differences that created and maintained such differences. Quite interestingly, it was now easily recognisable through the manners of people the class that they belonged to.

'Attunement' became one of the central themes in Elias's work. It arose as a reaction to the fact that men with varying inclinations and interests had to interact with each other and were forced to maintain an amicable relationship among them. Coexistence led to the refinement of behaviour in a number of ways. The art of inhibited behaviour attained significance. As Franz Boas (1901) would argue, the capacity of humans when it comes to *abstraction, inhibition and choice* are similar in all human beings, no matter whether they belong to primitive societies or the advanced societies of today. That is an argument that considers the 'nature' part of a human personality. The 'nurture' part is something we learn. Boas's argument can be studied in the light of the inhibited behaviour one learnt in the medieval Europe. Living together established a set of norms to be followed in all human interactions. The role of attunement could be seen as setting up a society based on a social division of labour with everyone accepting their respective roles in the society. In Elias's words, it was prescribed that “people must attune their conduct to that of others, and the web of action must be organised more and more strictly and accurately, if each individual action is to fulfill its social function” (Elias, 1978).

The idea of sublimation and greetings

All this resulted in the crystallisation of a set of manners through the application of external restraints that caused internal restraints to become a 'second nature' or *habitus* for human beings.⁷ The society could be seen to be marching towards the process of *sublimation* as explained by

⁷ *Habitus* was used in the German academic circles in the early twentieth century. Marcel Mauss used it in French. Elias used it only when writing in German. His English editions replace it with the term, 'personality makeup'.

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Freud and Jung. The term, 'sublime' means 'high' in Latin. The process of sublimation, according to Freud is the diversion of libido to non-instinctual channels. In his own words, “The task in sublimation is that of shifting the instinctual aims in such a way that they cannot come up against frustration from the external world. In this, sublimation of the instincts lends its assistance. One gains the most if one can sufficiently heighten the yield of pleasure from the sources of intellectual work” (...) “A satisfaction of this kind, such as an artist’s joy in creating, in giving his fantasies body, or a scientist’s in solving problems or discovering truths, has a special quality. But their intensity is mild as compared with that derived from the sating of crude and primary instinctual impulses”. (Freud, 1960). Barlett (1928) considers it a process of sacrifice that asks one to channelise one's instinctual energy towards other activities of social significance. He argued, “Every person, as he comes into a community, has to take part in this process by which civilised life has been built and by which alone it is maintained. He must repeat the *sacrifice* of his instinctive pleasures for the common good”. Thus, Europe saw an “expanding threshold of repugnance”. The animal side of the human personality was suppressed. The 'knife' became a symbol of death and danger and its use at the dining table was regulated in order to display its alternative uses other than killing and violence. The use of fork became popular owing to the fact that 'dirtying one's hands' while eating came to be seen as something undesired. Special norms encircled personal activities such as spitting and nose-blowing. Exposure of one's natural functions was considered to be a matter of shame. Consequently, a society was formed with a new set of manners that also engulfed the forms of greetings that people exchanged.

The Indian perspective on manners

Yogendra Singh characterises the Indian society on two main themes – *hierarchy* and *holism* (Singh, 1973). Thus, the Indian worldview (*weltanschauung*) introduces hierarchy in all relations whatsoever. Talcott Parsons considers family and education to be the two sources of socialization; family being the primary source while education is the secondary source of socialization. The notion of hierarchy in India manifests itself in the father-son relationship within the family (Mandelbaum, 1972) and the teacher-pupil relationship in the educational setting, both with special norms of greetings that entails two components – a speech act as well as a gesture. The term, 'namaskar' carries with it an emotion of submission from a subordinate to a superordinate. The word, 'namaskar' coupled with the gesture of 'touching the feet' completes the form of sacrifice that presents itself as a way of greeting someone whose benevolence might bring happiness to the sacrificer (in this case the sacrificer also). The traditional forms of education in India within a Gurukula were meant to teach the pupils the art of paying homage to the almighty, their parents as well as the teacher; the act of touching the feet being the common factor in all such reverential interactions. In order to complete the process of interaction, every act of greeting must be followed by a response from the one to whom it is addressed. The kinds of responses again depend on the cultural setting and the hierarchical equation between the two actors involved in the process of interaction. An exchange of greetings between equals involves

reciprocation in similar words from the addressed individual whereas it is in the form of a blessing if the person addressed to enjoys social superiority in comparison to one who greets.

The relevance of presents and gifts has played an important role in establishing relationships between human beings as well as kingdoms right through human history. The famous quartet coined by Kautilya – sama, dana, bheda and danda encompasses the concept of gift in the form of 'dana'. In order to manage the affairs of one's kingdom, one must maintain a healthy relationship with one's neighbours. Presenting them with gifts forms an essential part of the foreign policy. Similarly, as soon as the concept of 'self' comes into being, one's own body figuratively takes the shape of a kingdom that needs to be managed vis-a-vis the outer world. It is through symbolic gifts in the form of greetings that people manage their relationships with others.

The counter-view

Mikhail Bakhtin saw in cultures an inherent bias towards structured patterns of thinking and tried to weave a counter-argument that suggests that the suppressed voices itching for a chance to air their views are often silenced through the imposition of societal norms and mores in the form of a body of etiquette prescribing what to do and what not to do. Inspired by the French thinker, Francois Rabelais⁸, Bakhtin emphasised upon the concept of *carnavalesque* which provides a vent to the lower and neglected strata of the society to use these forms of representations to come up with counter-narratives to the widely accepted popular norms of the society. During carnivals, the limits of shame and the boundaries of self-restraints begin to recede and the thoughts that normally don't find a valve to ooze out slowly find a place in the public domain and then on attain a place among the topics of general discussion among the people. The phenomenon of carnivalesque is a step more than the carnivals themselves. It includes a body of literature that gives the repressed classes a voice and becomes their weapon in order to develop a counter-view against the dominant view of the culture.

Bakhtin emphasised upon the element of folk humour and laughter in the Middle Ages and the Renaissance period. The folklores did not find a place in the myths and epics. These contained descriptions and an imprint of the bourgeois modern culture while the folk humour worked as an undercurrent from the viewpoint of criticising the official stand on certain issues. Bakhtin writes: “A boundless world of humorous forms and manifestations opposed the official and serious tone of medieval ecclesiastical and feudal culture” (Bakhtin 1965). The clowns, fools, giants, dwarfs and jugglers with their myriad themes and parodies formed the folk carnival humour. Bakhtin classified the manifestations of the folk culture into three forms:

1. *Ritual spectacles*: carnival pageants, comic shows of the marketplace.
2. *Comic verbal compositions*: parodies both oral and written, in Latin and in the vernacular.
3. *Various genres of billingsgate*: curses, oaths, popular blazons.

⁸ Rabelais was a sixteenth-century French philosopher who studied the French culture through the lens of popular folk culture. The acts of fools and clowns as depicted during carnivals formed a major theme of his works.

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These ways of depicting the folk culture presented serious rituals and occasions of paying respect and rewards in the sublime culture linked to a set of manners in a comic sense. The comic relief that people derive from these acts actually give birth to a duality. There come in to existence two worlds – one with all seriousness in the form of ecclesiastical and feudal order, the other is the word of carnival. Bakhtin admits that: “Carnival is not a spectacle seen by the people; they live in it, and everyone participates because its very idea embraces all the people” (Bakhtin, 1965). He further claims that “During carnival time life is subject only to its laws, that is, the laws of its own freedom. It has a universal spirit; it is a special condition of the entire world, of the world's revival and renewal, in which all take part” (Bakhtin, 1965). The rules of greetings and other formalities of manners are completely set apart during the carnival. Hence, not only does carnival come as a comic relief for the people, it also breaks the general structured patterns of interaction.

Concluding Remarks

Having analysed the phenomenon of greetings as applicable in everyday interactions from both functional as well as critical perspectives, one must agree that greetings form an integral part of every culture. It is both a form of sacrifice as well as gift entailing an element of reciprocity. It is a true depiction of a civilised culture and a test of sublimation on the part of the people. The refined ways of living are manifested through greetings. The material part of greetings in the form of cards and other modern forms hint towards a technological advance in the realm of greetings. The modern process of production and the accompanying commodification of almost every aspect of human life have turned these emotions into an industry. A whole lot of brands have emerged owing to the necessity of designing cards and other material forms of greetings. Such objects of greetings employ the use of language in written form, quite different from the verbal manner of greetings. Themes of love and affection are expressed through written words the cards. While verbal greetings have an ephemeral existence, greetings in the form of cards assume permanence. The recipient can keep them as gifts for a long time. Nonetheless, it is happiness that is the prime driving force behind all human actions which gets manifested through greetings, be it greetings addressed to the morning rays full of life or to one's beloved with a zeal to express one's feelings in the minimum possible number of words and gestures.

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Conflict of Interests

The author declared no conflict of interests.

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Study of Emotional Disorders among Children with Poor Academic Performance

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ABSTRACT

Objectives: 1. To study the nature and prevalence of emotional disorder among children with poor academic performance., 2. To study the associated Psychiatric co-morbidities among children with poor academic performance were presenting with emotional disorders. **Material and Methods:** Total of 1480 children studying in 3 CBSE schools, aged between 6 and 12 years were screened. 312 children were found to be performing poor in academics. After simple randomization and further screening procedure 115 children were included in the study. Each child was assessed by interviewing with MINI-KID Questionnaire and CBCL and final diagnosis made by using ICD-10 DCR criteria. Statistical analysis was done using Epi Info 7 software. **Results:** The prevalence of poor academic performers was found to be 21.08%. The prevalence of emotional disorders among children with poor academic performance was found to be 22.61%. Majority of poor academic performers having phobic anxiety disorders of childhood accounts to be 9.57%. Other emotional disorders like, social anxiety disorder of childhood, sibling rivalry disorder and separation anxiety disorders of childhood accounts to be 6.96%, 6.09% and 3.48% respectively. **Conclusion:** Emotional disorders in school going children leads to poor performance in academics and school drop outs. Prevalence of emotional disorders were more in girls. Phobic anxiety disorder (Exam phobia /anxiety) is the most common type of emotional disorders presented by the children.

Keywords: Emotional disorders, Poor academic performance. Anxiety

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Education is considered as an important factor to measure personal and societal development. School education is an important segment of the whole educational structure and it is considered as a powerful instrument to develop student's behavior and hence the society. Low school enrolment, high dropouts and failure rates are reported characteristically in the weaker section of the society.^[1]

In India, it is generally noticed that 20% of children in class rooms are performing poor in their academics and several Indian school surveys in the past decade have recorded prevalence rates of poor academic performance in school children that range between 20 and 50%.^[2] Poor academic performance is one of the biggest worries for parents in the current competitive world. Thaker N et al and John P conducted studies in India showed that the children performing poor in their academics have co-morbid psychiatry problems.^[3, 4] Various studies had showed that there was high degree of association between psychiatric morbidity and scholastic backwardness.^[5-7] According to Kappelman et al 35% of children attending learning disability clinic had psychiatric problems.^[7] Most of the times these underlying psychiatric problems are missed by parents and teachers due to ignorance.

If a child is performing poorly in his or her academics, Emotional disorder in childhood (anxiety spectrum disorder) may be one of the cause.^[3]

Anxiety spectrum disorders in children

Childhood anxiety disorder mainly includes phobic disorders, separation anxiety disorder, social anxiety disorder, generalized anxiety disorder, panic disorder and obsessive-compulsive disorder. Anxiety is a normal reaction to certain situations. But severe anxiety can be a serious problem and lead to poor academic performance.^[8]

There are various reasons for school refusal or school phobia in children. The reasons may be separation anxiety disorder, generalized anxiety disorder, school phobia in specific. Other causes may be fear of death, physical or sexual abuse which are commonly associated with anxiety disorder.^[9] Anxiety is an important cause of school failure in girls, where as disruptive behavior is an important cause in boys.^[10] Social phobia and examination anxiety leads to reduced performance inspite of child having the capacity to perform better. Prevalence rates for anxiety disorders in children range from 2.3 to 9.2%^[11] and average around 8 %.^[12]

A study conducted by Mazzone L et al, in Italy showed that the average prevalence of anxiety disorder in children belonging to 3 age groups was 7.3%. The prevalence of anxiety disorder in each age group children were 2.3% in 8-10 years, 7.9% in 11-13 years and 15.3% in 14-16 years.^[13] A study conducted by Akapan MU et al in Nigeria. The prevalence rate of anxiety disorder was 10.28%.^[13] According to Haneesh K et al, showed that ratio of male and female in students diagnosed with anxiety disorder was 0.69:1.^[11]

METHODOLOGY

Source of data

Children of age group between 6 and 12 years studying in CBSE (Central Board of Secondary Education) schools in Belagavi city with poor academic performance.

Method of collection of data

Study Design: Cross sectional study, Study Duration: 1 year , Sample size: 115

Inclusion criteria:

Students aged between 6 and 12 years from CBSE schools, both genders. Students scoring Grade 'C' and below in final examination

Exclusion criteria:

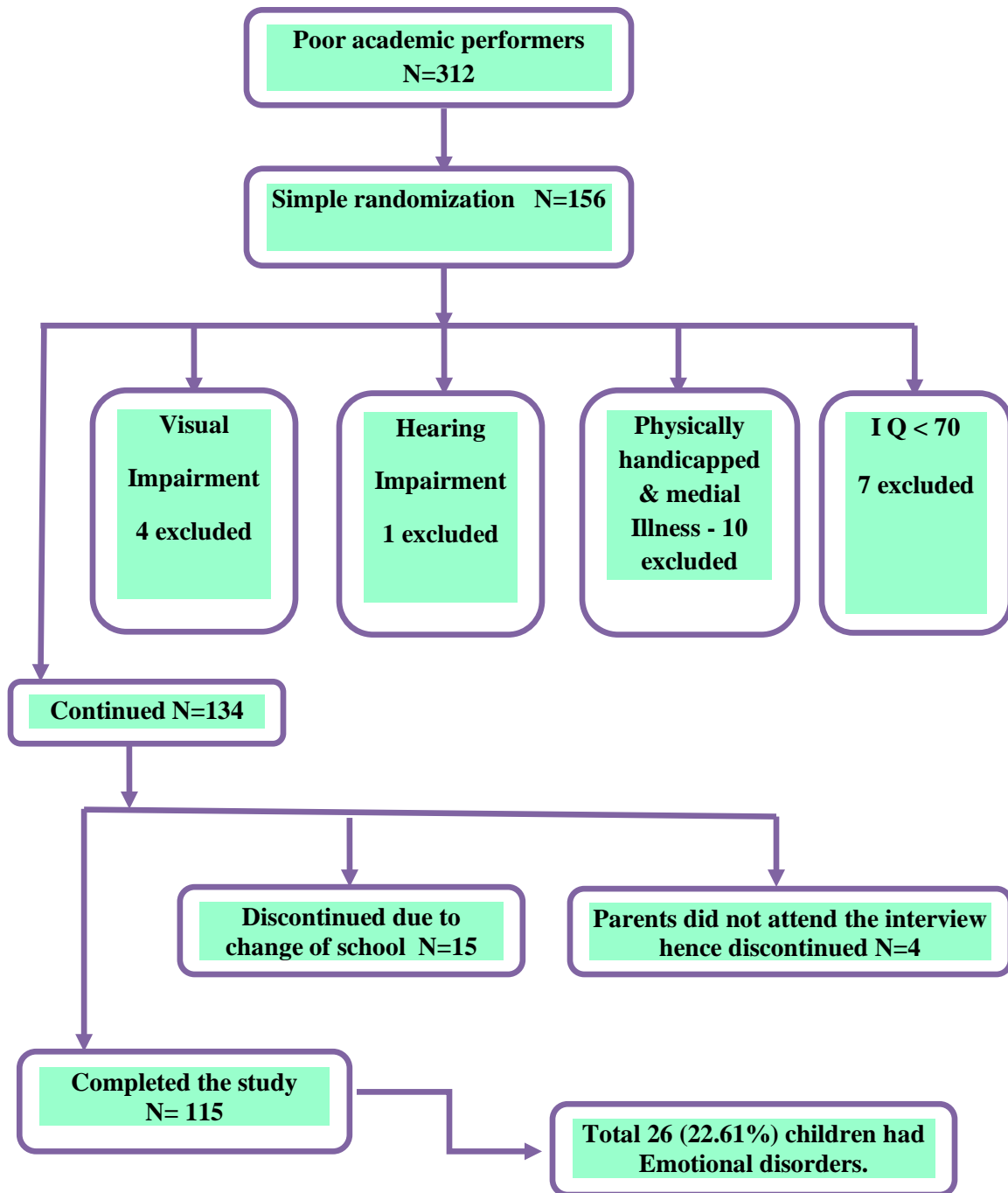
Students with visual, hearing impairment and other physical disabilities. Students suffering from acute and preexisting chronic medical disorders. Students whose Intelligence Quotient (IQ) is below 70.

Tools used:

MINI-KID Questionnaire, Child Behavioral Check List (CBCL), NIMHANS Index for Specific Learning Disorders, Temperament of children was assessed by Temperament Assessment Scale. The final diagnosis was made using ICD 10 DCR criteria. Statistical analysis was done using Epi Info 7 software.

RESULT

Figure 1: Study flowchart



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Table no 1: Prevalence of Emotional disorder. (N=115)

Variables		Total number of children.
Emotional disorder	Yes	26 (22.61%)
	No	89 (77.39%)

Table 1 and figure 1 shows that prevalence of the specific learning disorder among children with poor academic performance. With reference from study flow chart total 115 children completed the study, 26 children were having emotional disorders that accounts to be 22.61%.

Table no 2: Gender wise distribution of emotional disorders among study participants. (N=115)

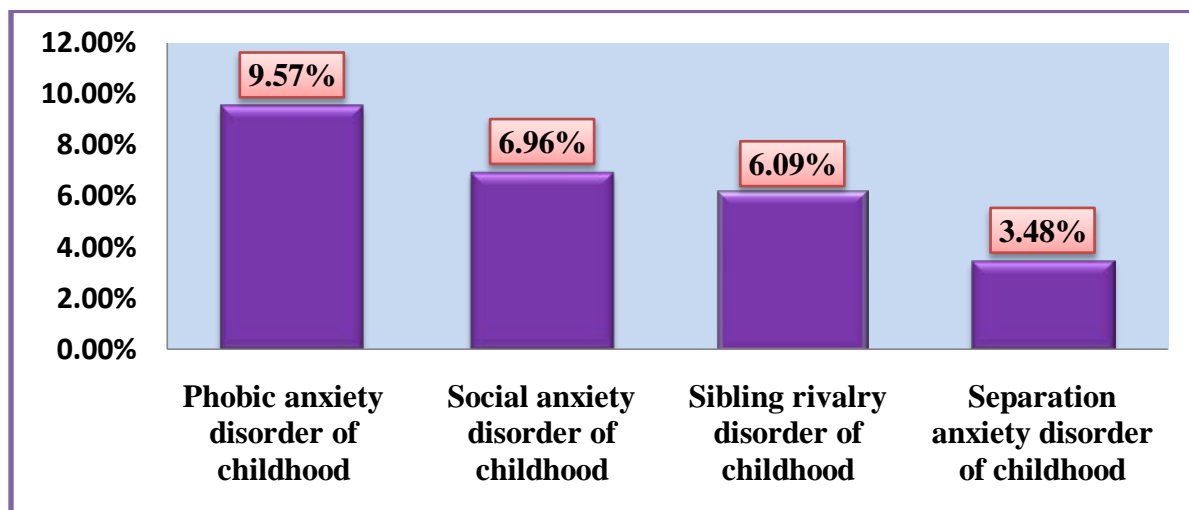
Variables		Gender	
		Boys	Girls
Emotional disorder	Yes	15 (20.0%)	11 (27.50%)
	No	60 (80.0%)	29 (72.50%)
Total		75 (100%)	40 (100%)

Table 2 shows that emotional disorder among children with poor academic performance. Out of 115 children 75, 40 were boys and girls. In that girls 11 (27.50%) and boys 15 (20.0%) were having emotional disorder.

Table no 3: Distribution of individual disorders in emotional disorder category.

Types of emotional disorder	Percentage
Phobic anxiety disorder of childhood	9.57%
Social anxiety disorder of childhood	6.96%
Sibling rivalry disorder of childhood	6.09%
Separation anxiety disorder of childhood	3.48%

Figure no 2: Distribution of study participants according to individual category of emotional disorder.



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Table 3 and figure 2 shows that distribution of study participants according to individual disorder in emotional disorder. In emotional disorder category, Phobic Anxiety disorders of childhood accounted for 11 (9.57%) followed by Social Anxiety disorder of childhood, Sibling Rivalry disorder of childhood and Separation Anxiety disorder of childhood with prevalence of 8(6.96%), 7 (6.09%) and 4 (3.48%) respectively.

Table 4: Psychiatric co-morbidities among study participants having emotional disorders. (N=26)

Variable		Emotional disorder
Psychiatric co-morbidities in study participants having emotional disorder	Borderline intellectual disability	04 (15.38%)
	Sleep disorder	02 (7.69%)
	Mood disorder	03 (11.53%)

Table 4 shows that co-morbid psychiatric disorders with emotional disorders in study participants. 15.38%, 7.69% and 11.53% of study participants with emotional disorders having co-morbid psychiatric disorders like borderline intellectual disability, Sleep disorder and Mood disorder respectively.

DISCUSSION

Poor academic performance in children, which is a major worrying problem to the parents. Poor functioning at school/ home, inconsistent poor attendance at school may be early signs of emerging or existing psychiatry problems.^[18] Despite teacher's efforts all children may not do well in academics. Often parents and teachers may not be able to pick up psychiatric problems. Though various causes for the poor academic performance in children are well explained in the literature,^[14,15] a very limited literature is available on psychiatry problems causing scholastic backwardness. This problem needs to be addressed. Early identification and intervention of this problem, can benefit these children. Hence this study was undertaken.

This study began by including 1480 students attending 3 CBSE schools of Belagavi City with age group ranging between 6-12 years. With the help of progress sheets of school children, it was found that 312 (21.08%) children were poor performers in academics i.e. children scoring grade C and below (as shown in Fig 1). Karande et. al in 2005 reported a prevalence of scholastic backwardness in school going children in India to be 20%.^[14] Our findings are similar to the finding of study conducted by Karande et. al.

In this study majority of the children were diagnosed to have emotional disorder (anxiety disorder) with presence of 25 (21.74%). Prevalence rates of anxiety disorder in children range from 2.3% to 9.2%^[16] and of around 8%.^[17] A study conducted by Mazzone L et.al on children with poor academic performance showed prevalence of anxiety disorder ranging between 2.3 and 15.3% .^{7[13]} Akapan M.U.et al reported prevalence of anxiety to be 10.98%.^[1] respectively.

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In our study male: female ratio in emotional disorder 0.8:1. Mazzone L et.al showed male: female ratio of anxiety disorder among scholastically backward children to be 0.69:1.^[13] Anxiety appears to be an important correlate of school refusal in girls, whereas disruptive behavioral disorders appears to be important co-relates of school refusal in boys.^{30[10]} As we now anxiety spectrum disorders most of the time having other co-morbid psychiatric disorders like mood disorders, sleep disorders. In our study also shows 11.53% of mood disorder and .6% of sleep disorders. Our study results corresponded with the results of previous studies. Hence our study findings can be considered as significant. (Table 3, 4 and figure 2)

CONCLUSIONS

Emotional disorders in childhood are becomes the one of the major factor for poor academic performance. Some children do poor performance in academics, exam phobia, school refusal and school drop outs. Prevalence of phobic anxiety disorder mainly about school/exam. so early detection of associated psychiatric problems and early intervention will surely help to handle the further consequences. We hope that this basic research increasingly will be applied to improve the quality of children lives.

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Conflict of Interests

The author declared no conflict of interests.

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Psychological Models of Depression and Anxiety: Counselor's Perspectives

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ABSTRACT

Negative psychological states like anxiety and depression have been the major focus of psychology over the last hundreds of years. People experience these negative psychological states as a part of their response to their threatening life events. These states sometimes help to cope with threatening situations. Humans are hard wired to respond in these ways as they are adaptive subsequent to traumatic events. There are multiple psychological models which explain the occurrence of anxiety and depression in clinical depression. The understandings of the formulation of these models help in the management of these clinical conditions. Anxiety and depression often co-exist among patients. The understanding of co-morbidity of anxiety and depression is the key in proper diagnosis and management of these clinical states. The current paper will focus on the detail description of psychological models of anxiety and depression and the possible link between these two clinical conditions. The paper will also enumerate brief psychological strategies of how to deal with anxiety and depression.

Keywords: *Anxiety, Depression, Psychological Models, Threat, Coping*

Anxiety is defined as apprehension about some unknown phenomena. Constant worry is the basic feature of anxiety. The root of anxiety lies in unconscious conflict between id and super-ego. Anxiety involves state of apprehension. Unlike fear, where the cause is known, in case of anxiety cause is unknown. May (1950) defined anxiety as "the apprehension cued off by a threat to some value which the individual holds essential to his existence as personality" Anxiety symptoms can be broadly classified in four groups. Cognitive symptoms: Indecisiveness, worry, impaired attention and concentration, memory impairment; Affective/emotional symptoms: Nervousness, anger, sadness; Physical symptoms: Muscle tightness, disturbed sleep, body-aches, high blood pressure, dry mouth, etc; Behavioral Symptoms; Irritability, impulsivity etc.

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Neuroticism

Neuroticism is a fundamental personality trait in the study of psychology. This trait is considered as proneness to anxiety. It can be defined as an enduring tendency to experience negative emotional states. It is featured in the form of constant worry, preoccupied that some bad will happen in future, and allows emotions to influence judgments. It was initially studied by Freud and later Eysenck included it in his personality model. The term neurosis was, however coined by Cullen in 1769. He used the term to refer to "disorders of sense and motion" caused by a "general affection of the nervous system." For him, it described various nervous disorders and symptoms that could not be explained physiologically.

Individuals who score high on neuroticism are more likely than the average to experience such feelings as anxiety, anger, guilt, and clinical depression. They respond more poorly to environmental stress, and are more likely to interpret ordinary situations as threatening, and minor frustrations as hopelessly difficult. They are often self-conscious and shy, and they may have trouble controlling urges and delaying gratification. Neuroticism is related to emotional intelligence, which involves emotional regulation, motivation, and interpersonal skills. It is also considered to be a predisposition for traditional neuroses, such as phobias and other anxiety disorders.

MODELS OF ANXIETY

1. ***Psychodynamic model:*** According to psychodynamic model, Freud (1926) argues that anxiety emanates from an unpleasant affective state originating in the unconscious. The anxiety is a symbol or signal of an unconscious conflict, usually stemming from childhood that remains unresolved. To deal with their feelings of anxiety, people develop psychological defenses that may be either adaptive or maladaptive.
2. ***Attachment model:*** This model was given by Bowlby in 1969. The basic premise of this model is that insecure attachment between the care giver and the child is the main cause of anxiety disorders in the child.
3. ***Eysenck's arousal model:*** Eysenck (1968) posits that activity of the cortico-reticular loop is associated with increased cortical arousal. This system provides neural substrate for extroversion-introversion. It is hypothesized that this system is easily activated in the introverts than extroverts, so that introverts are more easily aroused and shows high level of cortical arousal.
4. ***Incubation model:*** Incubation model of anxiety was given by Eysenck in the 1968. The basic idea of this model is the phenomena of extinction that is a part of classical conditioning in fact does not exist. In other words when a conditioned stimulus is presented without unconditioned stimulus for many trials, conditioned response doesn't stop; rather the strength of it rather increases. Eysenck posits that this phenomenon is also the cause of anxiety. He calls this as "Incubation".
5. ***Humanistic model:*** This model posits that when there is significant disparity between ideal and real-self, the chances of anxiety increases. Incongruence leads to anxiety. The model

posits that when human motive to self-actualize oneself is blocked because of external barriers, anxiety sets in. In other words, when a person's striving toward psychological growth is blocked, anxiety occurs.

6. *Existential model:* Existential model posits that basic human motive is "Will to meaning" and when this motive is not being fulfilled a person experiences existential frustration and it then lead to anxiety. It is also called as "Existential vacuum".

7. *Two-factor model:* Two - factor theory was given by Mowrer in 1947. The basic idea of the model posits that both classical and instrumental learning are responsible for causing anxiety. The model goes on to explain that anxiety is learned through classical learning while it is maintained through instrumental learning.

8. *Cognitive model:* Cognitive theories posit that appraisal plays the pivotal role in anxiety. The appraisal process involves two stages, a primary appraisal in which an individual determines the threat posed by the environment and following a threatening primary appraisal a secondary appraisal where the individual evaluates his or her ability to cope with the demand imposed by the environment. Beck and Emery (1985) suggests that maladaptive anxiety results from distortions in the appraisal process. People who suffer from chronic anxiety are those who misperceive benign situations as threatening. Barlow (1988) extends the appraisal model and suggests that anxiety is cognitive-affective phenomena, at the core of which is negative affect. Perceptions of threat are influenced by early experiences with uncontrollability that creates a psychological vulnerability to anxiety and a biological disposition to experience anxiety in the face of negative events. Specifically, negative events; activate the biological vulnerability to stress, leading trait-anxious individuals to perceive the environment as threatening even in the absence of identifiable stressor.

9. *Meta-cognitive model:* Wells (2009) developed the metacognitive model of generalized anxiety disorder (GAD). This model focuses on the role of metacognitive beliefs (i.e., thoughts about thinking) in the development and maintenance of emotional disorders and suggests that positive beliefs about the benefits of worry (e.g., "Worrying helps me cope") and negative beliefs about the danger and uncontrollability of worry (e.g., "my worrying is bad for me") are associated with pathological worry. This model has led to the development of new treatments for pathological worry, with research suggesting that modifying beliefs about worry enhances treatment outcome in anxiety disordered adults (Wells & King 2006).

Worry and Generalized anxiety Disorder:

Worry has been described as "a chain of thoughts and images, negatively affect-laden and relatively uncontrollable" (Borkovec et al. 1983, p. 10). Similarly, Vasey and Daleiden (1994, p. 186) describe worry as "primarily an anticipatory cognitive process involving repetitive, primarily verbal thoughts related to possible threatening outcomes and their potential consequences." Worry is also a feature of other anxiety disorders, including separation anxiety disorder and social phobia (Perrin & Last 1997). For example, a child with separation anxiety disorder may worry about losing or separating from his or her parent, and so may have

difficulties attending school or sleeping on his or her own. Clinical worry is also associated with risk of comorbidity with other anxiety disorders and depression.

The role of metacognition in worry

Wells (2004) defined metacognition as “the cognitive processes, strategies, and knowledge that are involved in the regulation and appraisal of thinking itself” (p. 167). Vasey (1993, p. 23) suggests that metacognition “involves introspective knowledge about (1) one’s cognitive states and abilities and their operation, and (2) strategies and procedures for effective problem solving”, and is “the nonconscious operations of a central executive that organizes and guides cognitive activity such as problem solving”. The main focus of the model has been on the metacognitive factors associated with pathological worry in adults with GAD. Wells (2009) hypothesized that worry is maintained by metacognitive beliefs concerning the benefits and dangers of worrying. Initially, it is triggered as a coping response by an intrusive thought (e.g., “What if I get cancer?”) and is primarily focused on a range of issues including physical health, social, or financial concerns. This is known as Type 1 worrying. Positive metacognitive beliefs are linked to the usefulness of worry as a coping strategy, and these beliefs include “Worrying helps me cope” or “If I worry I’ll be prepared”. Wells suggests that positive beliefs about worry are normal and should be observed in clinical and non-clinical populations.

Individuals with GAD are differentiated by the activation of negative beliefs about worry, specifically the uncontrollability (e.g., “My worrying thoughts persist, no matter how I try to stop them”) and the danger (e.g., “Worrying will make me go crazy”) of worry. The activation of these beliefs contributes to negative appraisals of worry, including worrying about worry, which is known as Type 2 worry or meta-worry. Negative emotions associated with meta-worry, such as increased anxiety, make it increasingly difficult for the individual to recognize that it is safe to stop worrying.

Wells (2009) posits that type 2 worry contributes to two feedback cycles that maintain the worry process. First, behaviors such as reassurance seeking or avoidance of cues that trigger worry maintain negative beliefs about the danger and uncontrollability of worry. This is because the individual relies on external information to control their thoughts, they miss out on opportunities to learn that worrying is controllable and harmless, and they are prevented from learning more adaptive coping strategies. The second feedback cycle relates to thought control strategies, such as suppression of thoughts that trigger worry. Thought-control strategies are hypothesized to actually increase the number of thought intrusions and reinforce the belief that worry is uncontrollable. There is also a failure to interrupt the worry process.

10. Trait model: McCrae and Costa in 1990 gave five factor model of personality. The model posits that human personality is mainly comprised of 5 main/core traits. These are openness to experience, conscientiousness, extraversion agreeableness and neuroticism. Earlier, Eysenck (1967) using a mixed trait-type factor analytical approach gave PEN model of personality and linked that to anxiety. PEN stands for Psychoticism, Extraversion and Neuroticism.

11. Expressive-Behavioral model: Expressive-behavioral theories view anxiety as an innate response that has evolved because of its adaptive value. Izard (1991) conceptualizes anxiety as a composite of a number of discrete emotions and the most important of which is fear. Other emotions that combine with fear to create anxiety include anger, guilt and shame and which of these emotions combine with fear to create anxiety depends on the situation in which anxiety is expressed. Discrete emotions theorists focus on the affective or feeling component of anxiety while deemphasize the cognitive elements of anxiety.

12. Cloninger's Model: One latest model of personality and its relation to psychopathology has been proposed by Cloninger in the 1987. According to this model, the main traits are reward dependence, novelty seeking, harm avoidance and persistence. The three traits which he calls as characters are self-directedness, cooperativeness and self-transcendence. This is mainly biological model because it explains these traits in terms of neurotransmitters. This is measured by Temperament and Character Inventory (TCI). People high on harm avoidance dimension of their personality are prone to maladaptive anxiety.

13. Biological model: Biological theorists suggest that different emotions result from activation of specific parts of brain. One of the influential theories was given by Jeffery Gray in 1976. The theory asserts that anxiety stems from the activation of the "Behavioral-Activation System" (BAS). The BAS inhibits behavior in response to threatening stimuli. People who are high in trait-anxiety have very reactive BAS and hence are prone to anxiety. Behavioral genetics researchers have found that a substantial portion of the variability on measures of neuroticism can be attributed to genetic factors.

DEPRESSION: NATURE AND MODELS

Mood disorders are the category of mental disorders in which significant and chronic disruption in mood is the predominant symptom, causing impaired cognitive, behavioral and physical functioning. Major depression also known as simply depression is a mood disorder characterized by extreme and persistent feelings of despondency, worthlessness and hopelessness, causing impaired emotional, cognitive, behavioral and physical functioning. It is a complex diagnostic construct, applied to individuals with a particular set of symptoms among which the essential ingredients are a sad mood, a loss of interest in usual pleasurable activities and easy fatigability. Depression has substantial short term and long term consequences for the individuals affected their families and society. The symptoms can cause immense distress to patients and are often associated with a variety of social and occupational impairments. The social and economic burden it poses for the community makes it one of the most serious health problems faced by the society. The studies (Epidemiological Catchment Area Study) indicate that major depression has a 1 month prevalence of 2.2% and life time prevalence of 5.8% in Americans (Regier, 1988). In India, the prevalence rate for major depression was found to be 31.2 per 1000 (Murali, 2001).

The symptoms in of depression in children and adolescents are often externalized and often expressed in the form of irritability and anger outburst. The diagnosis of depression as per ICD X is made in adults if the following core symptoms persist for two weeks.

- Persistent sad mood
- Easy fatigability and
- Loss of interest in usually pleasurable activities.

MODELS OF DEPRESSION

Depression is explained on the bio psychosocial model asserting that biological, psychological and social factors play a combined role in the etiology of depressive disorder. Here in this paper, only contemporary psychological models are discussed in brief.

1. **Cognitive model:** This model was propounded by Aaron Beck in 1967. He posits that after a series of negative events in childhood like death of a loved one, emotional or physical abuse, individuals may develop a deep seated negative schema, an enduring negative cognitive belief system about some aspect of life. People think negatively about themselves, their immediate world and their future. This combination is often known as *cognitive triad*. Beck argues that depression may result from a tendency to interpret everyday events in a negative way. These negative cognitive set of beliefs is known as cognitive errors. Some of the examples of these cognitive errors overgeneralization, minimization, magnification, personalization etc. In this theory, a self-blame schema is developed in which people feel personally responsible for every bad thing that happens in their life. In Beck's view, these cognitive errors and schemas are automatic and are not consciously available to the people and they are not even aware of thinking negatively and illogically. Thus, minor negative event can lead to a major depressive episode. In cognitive behaviour therapy, the patients are helped to be aware of these cognitive errors and start thinking more realistically and logically.

2. **Learned helplessness model:** This model was propounded by Martin Seligman in 1967. after his classic experiment on dogs. The basic idea of this model is depression occurs when people feel helpless and believe that whatever they do, it won't change the apparently negative and aversive situation based on their experiences. Later his theory was reformulated by Abramson et al in 1978 which suggests that people who are vulnerable to depression tend to offer internal, global and stable causal explanations for negative events.

3. **Reinforcement model:** This model was propounded by Peter Lewinsohn in 1973. It is a behavioral theory of depression. A key tenet of the approach is the assumption that a low rate of positive reinforcement constitutes a critical antecedent condition for the occurrence of depressive behaviors. In effect, the behavioral theory requires the onset of depression be accompanied by a reduction in positive reinforcement, that intensity of depression co vary with rate of positive reinforcement, and that improvement be accompanied by an increase of positive reinforcement. It has become evident that a low rate of behavior constitutes an extremely important clinical aspect of depression. Consistent with the major premises of the theory, the principal goal of

treatment is to restore an adequate schedule of positive reinforcement for the patient by altering the level, the quality, and the range of his activities and interpersonal interactions. According to Lewinsohn, depressed people are precisely those people who do not know how to cope with the fact that they are no longer receiving positive reinforcements like they were before. For example, a child who has newly moved to a new home and has consequently lost touch with prior friends might not have the social skills necessary to easily make new friends and could become depressed. Similarly, a man who has been fired from his job and encounters difficulty finding a new job might become depressed. The therapeutic implication of this model is to introduce activity scheduling techniques in psychotherapy.

4. ***Life event model:*** This model posits that significant negative life events and chronically stressful circumstances are associated with depression (Brown & Harris, 1989). Negative life events and how people appraise and understand those events will decide whether the depression will occur or not.

5. ***Interpersonal models of depression:*** Negative interpersonal circumstances are particularly likely to play a role in depression. Marital, family and peer relations are often troubled and interpersonal forms of stress such as relationship endings, conflicts and lack of supportive relationships are consistently associated with depression (Beach & Finchman, 1998). Subsequent to marital split, men faced a more heightened risk for developing depressive disorder than women. Interpersonal models of depression highlight how the disorder can be both a cause and a consequence of interpersonal problems. Coyne (1976) suggested that depressed people engage in behaviors that elicit rejection from others and this rejection leads to further depression. Depressed people generate interpersonal stress in their lives, which then makes them more depressed.

6. ***Social support model:*** In a landmark study, Brown and Harris (1978) first suggested the important role of social support in the onset of depression. In a study of large number of women who had experienced a serious life stress, they discovered that only 10% of the women, who had a friend in whom they could confide become depressed, compared to 37% of the women who did not have a close supporting relationship. Later prospective studies have confirmed the importance of social support or lack of it in predicting the later onset of depressive symptoms (Kendler et al, 2005).

7. ***Self-control model:*** Self-control model of depression was given by Lynn Rehm in 1977. It is based on the three processes included in a feedback loop model of self-control: self-monitoring, self-evaluation, and self-reinforcement. In this model, depression is characterized as the result of deficits in these processes of self-control. Self-monitoring is described as the observation and evaluation of one's own behavior, including its antecedents (events preceding the behavior) and consequences. Rehm describes two characteristics of self-monitoring in those who experience depression: the tendency to attend only to negative events and the tendency to recognize only immediate consequences of behavior. Self-evaluation is described as an individual's perception of their growth and progress compared to an internal standard. For example, a dieter may compare their calorie count for the day to a goal and decide whether or not

they reached that goal. An internal standard can be set by adopting externally imposed standards, such as a diet calorie chart based on sex and height, or they may choose criteria that is more or less stringent than external standards. In Rehm's model, self-evaluation is characterized in those experiencing depression by inaccurate, and often external, attributions of causality and stringent self-evaluation criteria. For example, an individual who self-imposes a criterion of obtaining 100% on every test they take has set an unrealistic criterion. When that stringent criteria is not met, the individual may inaccurately attribute their failure to an internal characteristic, such as intelligence. Rehm also includes self-reinforcement in his model, and states that those experiencing depression infrequently engage in self-reward and engage more frequently in self-punishment.

8. ***Psychoanalytical model of depression:*** Psychoanalytic model of depression: This was given by Sigmund Freud in 1917. His theory posits that depression is a result of anger turns inward a process known as introjections which results due to the loss or rejection by a parent. Depression is a manifestation of inwardly directed anger and severe super ego demands. Freud distinguished between actual losses (e.g. death of a loved one) and symbolic losses (e.g. loss of a job). Both kinds of losses can produce depression by causing the individual to re-experience childhood episodes when they experienced loss of affection from some significant person (e.g. a parent). Later, Freud modified his theory stating that the tendency to internalize loss objects is normal, and that depression is simply due to an excessively severe super-ego. Thus, the depressive phase occurs when the individual's super-ego or conscience is dominant. In contrast, the manic phase occurs when the individual's ego or rational mind asserts itself, and s/he feels control. In order to avoid loss turning into depression, the individual needs to engage in a period of mourning work, during which s/he recalls memories of the lost one. This allows the individual to separate him/herself from the lost person, and so reduce the inner-directed anger. However, individuals very dependent on others for their sense of self-esteem may be unable to do this, and so remain extremely depressed.

9. ***Integrative model:*** This model says that depression is a function of multiple factors including biological, interpersonal, cognitive, behavioural and host of sociocultural influences. No single theory can account for the occurrence of depressive disorder in an individual.

ANXIETY AND DEPRESSION: CO-MORBIDITY

Research and clinical work has shown that clinically significant anxiety and depression often co-exist. This is often as co-morbidity. It refers to the presence of more than one or two or more distinct clinical diagnosis in the same individual. One of the most common models which attempt to explain the existence of both depression and anxiety in clients is known as tripartite model given by Clark and Watson in 1991. The tripartite model states that anxiety and depression share a common Negative Affectivity (NA) factor, whereas physiological hyperarousal (PH) is specific to anxiety and low positive affect (PA) is specific to depression. NA may involve "transdiagnostic factors," including neuroticism, rumination, and intolerance of

uncertainty. The shared NA factor links sadness/depression and anxiety/fearfulness, thus accounting for co morbidity between anxiety and depression.

Latest class analysis, a statistical procedure similar to factor analysis examined the commonality among anxiety and depression. A latent class analysis indicated that the vast majority of adolescents with high levels of depression also had high levels of anxiety, but that the reverse was not true. Adolescents with high levels of anxiety had either high or low levels of depression (Ferdinand, De Nijs, van Lier, & Verhulst, 2005). This indicates that depressed youth tend to report high levels of both depression and anxiety, whereas anxious youth tend to report high levels of anxiety but relatively low levels of depression. One of the models explaining frequent co-occurrence of anxiety and depression was given by Seligman and Ollendick (1998). They argued possibility of four factors: (1) co morbidity between anxiety and depression in youth is due to overlap in definitions; (2) anxiety and depression represent two indicators of a single construct; (3) comorbidity is due to overlap in risk factors; (4) anxiety causes or puts youth at risk for depression. There are two concepts which are important to remember in understanding developmental psychopathology among adolescents.

These are

- a) *Principles of equifinality*: It means that different pathways or risk factors may lead to the same outcome. It means that the same clinical condition/psychopathology might be caused by different factors. For example, depression might occur because of lack of social skill deficit or it may also occur because of marital discord and
- b) *Principle of multifinality*: It means the same risk factor may lead to different outcomes in examining the interactive processes that may lead to the emergence of psychopathology. For example, marital discord may lead to depression or it may also lead to post traumatic stress disorder.

Simple scientific ways of managing clinically significant anxiety

There are many psychological strategies which might help to deal with excessive anxiety. It is important to remember that diagnosis be done by trained mental professional and patients learn the skills of anxiety management by these trained professionals.

The following techniques might be useful

1. Understanding the specific possible causes of anxiety is the key to learn the management skills
2. Deep breathing technique
3. Jacobson Progressive Muscular Relaxation
4. Mindfulness
5. Learning to learn facing the threatening situations after acquiring the required skills

Simple scientific ways of managing sad mood

1. Making a good day diary in which any event which improves one's mood need to be written. The possible cause of why the event was pleasurable/good should be either written or discussed
2. Trying to engage in activities which are being liked. For example listening to songs, walking etc. The activity may be done for short period of time without.
3. Involving in religious and spiritual practices as much as possible.
4. Practicing mindfulness
5. Walking or jogging

CONCLUSIONS

Negative psychological states like anxiety and depression are commonly experienced by children, youths and adults. Negative life events often cause people to experience threat and sad mood which are often adaptive and people come out with them with time. However, there are times the intensity, frequency and duration of threat and sad mood persist longer than the usual duration of adaptation and start effecting people's social, occupational, interpersonal and biological functioning. These need to be evaluated and managed by trained mental health professionals. Co-morbid anxiety and depression are very common among patients of these clinical conditions. Clinicians need to make sure that co-morbidity be properly examined and treatment is modeled based on this. It will help proper management of the patients and increase the quality of clinical outcome and thereby patients' well-being.

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Conflict of Interests

The author declared no conflict of interests.

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A Study of English Verbal Ability of School Students of Gujarat State with Respect To Gender, Age and Area

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ABSTRACT

Aptitude tests have existed from the decade of 1940s with the title of the General Aptitude Test Battery. This was an initiative of the United States Employment Service which for the following decades, have helped students to determine their career aptitude. It has been documented that it leads people to their respective choice of careers with an up sloping growth and with so much feelings of professional fulfillment. Presently, the career aptitude tests have evolved to include not only the tests of skills and abilities but also the tests of personality class or type. Aptitude is not synonymous to one's intelligence or mental abilities. It should not be confused with other terms such as intelligence quotient or intelligence level that dictate mental classifications such as the genius, child prodigy, mentally delayed, and mentally retarded, to name a few. Aptitude simply means and implies an individual's good fit and suitability for a certain skill or task in a given environment.

Now that it has been settled that career aptitude tests can be administered to both high school undergraduates and graduates, there emerged several discussions regarding the benefits taking the career aptitude tests may render to students who are in their junior and senior high school years, versus when it is taken at a latter age. Early adolescence and late adolescence stage is filled with a lot of developmental tasks and adjustments. Chances of peer pressure, influences of advertisements as well as of those who are within their social circle may create more confusion to the many decisions they have to make, including career related decisions. Although this conclusive theory does not apply to all, this implies that increasing their awareness will somehow provide them an idea of a path that they may take, or a direction in their future careers, and decrease the chances of career mismatches by strengthening their viewpoint on their capabilities and matched career options.

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A Study of English Verbal Ability of School Students of Gujarat State with Respect To Gender, Age and Area

A self constructed test by researcher was used to test the English Verbal Ability of the school students of Gujarat state from the age of 11 years to 13 years. The data collected so were analyzed using 'critical ratio' to test the significance of difference of area and sex on the students.

Keywords: *English Verbal Ability, School, Students, Gujarat State, Gender, Age, Area*

The current generation is witnessing an unprecedented explosion of knowledge. Today, we live in a world where because of change in knowledge, shifting demographics, technological changes and economical globalization, jobs and needs are created and dissolved simultaneously. Due to explosion of knowledge for certain professionals their present knowledge and skills may become out of date in a very quick time. Thus, education alone is not enough for people to prepare them self to make a stand in this ever fast evolving world.

Today's parents do realize that they have to prepare their child for a kind of world, where change is product of every moment. Everyone needs to be able to compete and survive in the 21st century's work environment. Awareness of this 'need for survival' is named as carrier literacy. For any job, it is required to get a special qualification which is mandatory for the job. To get this qualification students go to education institutes. Due to population explosion today there are more candidates for any job than the vacancies ever. So there becomes very fierce competition in every field, which leads to undue stress for children and his parents. So it becomes necessary to know oneself strong and weak points which will help in the carrier progression.

The definition of aptitude, according to the Merriam-Webster online dictionary, is "an inclination... tendency... natural ability... general suitability". Here this suitability can be worked out by employing the career aptitude test on a desired group of people to find out the desired people out of a given group.

So, now it is more important to know about 'self'. This awareness helps student to identify their talent. But this is not a simple process for talented students. There are many ways to know about 'self' like; ability tests, achievement tests, various competitions, continuous assessment, interpretation etc. physiological parameters. These tests can be conducted at the higher secondary level in school because this is a stage where a student has to make a choice about their career. Therefore researcher decided to conduct a study in the field of the English Verbal Ability because English language is a much sought after subject these days.

Objectives

- (1) To construct and standardized the English Verbal Ability test for school students.
- (2) To study the comparative effect of area on English Verbal Ability of school students.
- (3) To study the comparative effect of gender on English Verbal Ability of school students.

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- (4) To study the comparative effect of age on English Verbal Ability of school students.
- (5) To establish norms on English Verbal ability test for school students.

Hypotheses

- Ho₁:- There will be no significant difference between the mean score of 11 years old urban and rural area school students on English Verbal ability test.
- Ho₂:- There will be no significant difference between the mean score of 11 years old boy and girl school students on English Verbal ability test.
- Ho₃:- There will be no significant difference between the mean score of 11 years old urban area boy and girl school students on English Verbal ability test.
- Ho₄:- There will be no significant difference between the mean score of 11 years old rural area boy and girl school students on English Verbal ability test.
- Ho₅:- There will be no significant difference between the mean score of 11 years old urban and rural area boy school students on English Verbal ability test.
- Ho₆:- There will be no significant difference between the mean score of 11 years old urban and rural area girl school students on English Verbal ability test.
- Ho₇:- There will be no significant difference between the mean score of 12 years old urban and rural area school students on English Verbal ability test.
- Ho₈:- There will be no significant difference between the mean score of 12 years old boy and girl school students on English Verbal ability test.
- Ho₉:- There will be no significant difference between the mean score of 12 years old urban area boy and girl school students on English Verbal ability test.
- Ho₁₀:- There will be no significant difference between the mean score of 12 years old rural area boy and girl school students on English Verbal ability test.
- Ho₁₁:- There will be no significant difference between the mean score of 12 years old urban and rural area boy school students on English Verbal ability test.
- Ho₁₂:- There will be no significant difference between the mean score of 12 years old urban and rural area girl school students on English Verbal ability test.
- Ho₁₃:- There will be no significant difference between the mean score of 13 years old urban and rural area school students on English Verbal ability test.
- Ho₁₄:- There will be no significant difference between the mean score of 13 years old boy and girl school students on English Verbal ability test.
- Ho₁₅:- There will be no significant difference between the mean score of 13 years old urban area boy and girl school students on English Verbal ability test.
- Ho₁₆:- There will be no significant difference between the mean score of 13 years old rural area boy and girl school students on English Verbal ability test.
- Ho₁₇:- There will be no significant difference between the mean score of 13 years old urban and rural area boy school students on English Verbal ability test.

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Ho₁₈:- There will be no significant difference between the mean score of 13 years old urban and rural area girl school students on English Verbal ability test.

Operational Definition

English Verbal Ability:

The scores obtained by school students on the self constructed English Verbal Ability test were considered as the English Verbal ability of the school students.

Variables:

Dependent Variables: English Verbal Ability Test Score

Independent variables: Area, sex and age group were taken as independent variables

Abbreviations: EVAT: English Verbal Ability Test

Delimitation

The study was delimited to students of Gujarat state aged between 11 to 13 years old only.

Design Of The Study:

Survey method of the research was used in the present study.

Population

The students of age group from 11 to 13 years old school students studying in geographical area of Gujarat state with medium of instructions English only formed the population for the present study.

Sample

In the present research all the Gujarat state was divided in the five parts. The Stratified Random Cluster sampling was used for the sample selection. From the selected school classes were selected randomly and all present students of selected class were included in samples for practical convenience. Finally 2204 samples were collected for the data analysis.

Tool

A self constructed English Verbal Ability test was used to study the English verbal ability test in the Gujarat state. After construction of the first draft, it was reviewed by the experts and finalized after piloting on 250 students. Final test contained 20 items on the English Verbal ability.

Data Collection

Data collection was done with the self constructed tool from 2204 students. The whole Gujarat state was divided in the five zones for the purpose for the data collection.

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DATA ANALYSIS AND INTERPRETATION:

Objective I: To study the comparative effect of Gender and Area and Age on the English Verbal Ability of school students.

Under this objective different hypothesis were formulated and were tested using the significance of difference between mean scores using t-ratio. Result of analysis is listed in table 1.1.

Table 1.1: Mean, Sd And T Value Of 11, 12 And 13 Years Old Urban And Rural Area School Students On English Verbal Ability Test

Sl No	H0	Area/gender	Age	Number	Mean	SD	SED	t Value	Remarks
1	H01	Urban	11	199	5.84	2.88	0.331	0.99	Accepted
		Rural	11	86	5.81	2.42			
2	H02	Boys	11	174	5.7	2.7	0.328	2.43	Rejected at 0.05 level
		Girls	11	111	6.5	2.7			
3	H03	U Boys	11	114	5.72	2.83	0.416	0.93	Accepted
		U Girls	11	85	6.11	2.96			
4	H04	R Boys	11	60	5.65	2.68	0.476	1.13	Accepted
		R Girls	11	26	6.19	1.67			
5	H05	U Boys	11	114	5.72	2.83	0.436	0.16	Accepted
		R Boys	11	60	5.65	2.68			
6	H06	U Girls	11	85	6.11	2.96	0.459	0.17	Accepted
		R Girls	11	26	6.19	1.67			
7	H07	Urban	12	291	7.32	3.28	0.330	3.51	Rejected at 0.01 level
		Rural	12	122	6.16	2.96			
8	H08	Boys	12	240	6.87	3	0.330	0.78	Accepted
		Girls	12	173	7.13	3.52			
9	H09	U Boys	12	162	7.36	3.2	0.389	0.23	Accepted
		U Girls	12	129	7.27	3.37			
10	H010	R Boys	12	78	5.84	2.19	0.530	1.65	Accepted
		R Girls	12	44	6.72	3.11			
11	H011	U Boys	12	162	7.36	3.21	0.354	4.29	Rejected at 0.01 level
		R Boys	12	78	5.84	2.19			
12	H012	U Girls	12	129	7.27	3.37	0.555	0.99	Accepted
		R Girls	12	44	6.72	3.11			
13	H013	Urban	13	308	7.65	3.12	0.408	0.7	Accepted
		Rural	13	97	7.36	3.62			
14	H014	Boys	13	233	7.31	2.98	0.307	2.08	Rejected at 0.05 level
		Girls	13	172	7.95	3.11			

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15	H01 5	U Boys	13	176	7.4	3.1	0.368	1.63	Accepted
		U Girls	13	132	8.0	3.26			
16	H01 6	R Boys	13	57	7.05	3.62	0.748	1.0	Accepted
		R Girls	13	40	7.8	3.63			
17	H01 7	U Boys	13	176	7.4	3.1	0.533	0.65	Accepted
		R Boys	13	57	7.05	3.62			
18	H01 8	U Girls	13	132	8.0	3.26	0.640	0.31	Accepted
		R Girls	13	40	7.8	3.63			

1. **H01:** It is found from the table 1.1 that there is no significant difference between the English verbal Ability of 11 years old urban and rural students. Thus **H01** was accepted.
2. **H02:** It is found from the table 1.1 that there was significant difference between the English verbal Ability of 11 years old boy and girl students at 0.05 level. Thus **H02** was rejected at 0.05 level.
3. **H03:** It is found from the table 1.1 that there is no significant difference between the English verbal Ability of 11 years old urban boy and urban girl students. Thus **H03** was accepted.
4. **H04:** It is found from the table 1.1 that there is no significant difference between the English verbal Ability of 11 years old rural boy and girl students. Thus **H04** was accepted.
5. **H05:** It is found from the table 1.1 that there is no significant difference between the English verbal Ability of 11 years old urban and rural boy students. Thus **H05** was accepted.
6. **H06:** It is found from the table 1.1 that there is no significant difference between the English verbal Ability of 11 years old urban and rural girl students. Thus **H06** was accepted.
7. **H07:** It is found from the table 1.1 that there was significant difference between the English verbal Ability of 12 years old urban and rural students at 0.01 level. Thus **H07** was rejected at 0.01 level.
8. **H08:** It is found from the table 1.1 that there is no significant difference between the English verbal Ability of 12 years old boy and girl students. Thus **H08** was accepted.
9. **H09:** It is found from the table 1.1 that there is no significant difference between the English verbal Ability of 12 years old urban boy and girl students. Thus **H09** was accepted.
10. **H010:** It is found from the table 1.1 that there is no significant difference between the English verbal Ability of 12 years old Rural boy and girl students. Thus **H010** was accepted.
11. **H011:** It is found from the table 1.1 that there was significant difference between the English verbal Ability of 12 years old urban and rural boy students at 0.01 level. Thus **H011** was rejected at 0.01 level.

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12. **H012:** It is found from the table 1.1 that there is no significant difference between the English verbal Ability of 12 years old urban and rural girl students. Thus **H012** was accepted.
13. **H013:** It is found from the table 1.1 that there is no significant difference between the English verbal Ability of 13 years old urban and rural students. Thus **H013** was accepted.
14. **H014:** It is found from the table 1.1 that there was significant difference between the English verbal Ability of 13 years old boy and girl students at 0.05 level. Thus **H014** was rejected at 0.05 level.
15. **H015:** It is found from the table 1.1 that there is no significant difference between the English verbal Ability of 13 years old urban boy and girl students. Thus **H015** was accepted.
16. **H016:** It is found from the table 1.1 that there is no significant difference between the English verbal Ability of 13 years old rural boy and girl students. Thus **H016** was accepted.
17. **H017:** It is found from the table 1.1 that there is no significant difference between the English verbal Ability of 13 years old urban and rural boy students. Thus **H017** was accepted.
18. **H018:** It is found from the table 1.1 that there is no significant difference between the English verbal Ability of 13 years old urban and rural girl students. Thus **H018** was accepted.

MAJOR FINDINGS

1. 11 years old Girls students have the higher English Verbal Ability than 11 years old boy students.
2. 12 years old urban area students have the higher English Verbal Ability than rural area students.
3. 12 years old urban area boy students have the higher English Verbal Ability than rural area boy students.
4. 13 years old Girl students have the higher English Verbal Ability than 13 years old boy students.

EDUCATIONAL IMPLICATION

In English Verbal ability test, mean scores of urban area school students were found higher than rural area school students, means that English Verbal ability of urban area school students were higher in comparison to rural area. This result shows that teachers have to organize tutorial and guidance programme during academic sessions, which can enhance the abilities of rural area students and helps them to increase their English Verbal ability. There is a need to put more emphasis on the learning of English in the rural area students, so that the gap between urban and rural can be bridged.

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In English Verbal ability test, mean scores of girls school students were found to be higher than to boys students. This result shows that teacher have to make boys aware of need and role of language aptitude in educational and occupational fields. Teachers should also help the girls who are excellent in the verbal ability to excel in the field of literature and other allied fields. Teachers should also take efforts on improving the verbal ability of boys and have remedial teaching. On other hand for girls students, teachers should make efforts to further their interest in English Verbal communication and writing to have them better command over English language.

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Conflict of Interests

The author declared no conflict of interests.

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A Comparative Study Job Satisfaction among the Working Men in Vadodara Industrial Area

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ABSTRACT

The term job satisfaction refers to favorable or unfavorable feelings and emotion of the employees towards their own work. It refers to the satisfaction of the employee in his own profession. Job satisfaction is the result of various attitudes possessed by an employee towards his job. These attitudes may be related to job factors such as wage, job security, job environment, nature of work, opportunity for promotion, prompt removal of grievance, opportunity for participation in decision making and other fringe benefits. Life is itself a process of adjustment. If any one wants satisfaction in life, then they have to adjust with their environment. The total sample consisted of 240 men from different industrial Area in Vadodara. The sample was selected from randomly. Job satisfaction scale By Brefield Roth - Gujarati Format By Parikh developed were used for data collection. 2×3×2 factorial design was used.

Keywords: *Job Satisfaction, Working Men, Vadodara, Industrial Area*

Man works not only for money alone but also to satisfy his higher order needs, needs to be recognized, to be appreciated and to feel a sense of achievement in whatever one does. Employees in different establishment view their respective worlds of work in different perspective for various reasons. They may differ in their respective personalities, need, and social background or in demographic factors. But the facts remains that they tend to act or behave in their peculiar way on the background of their perceptions. A person joins an organization with certain hopes, expectation, drives and needs which affects his performance.

Sometimes it seems to be difficult to ascertain. This varies from person to person. However it is highly useful to understand as to how the need create tension, which stimulates the effort to perform and how effectively performance brings satisfaction. Goods dictionary of education (1973) states job satisfaction as a quality, level or state of satisfaction which is result of various interests, attitudes of person towards his job.

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The workers' satisfaction in work is greatly affected by the physical condition in which the work is done, the way in which the flow of work is organized and the equipments and materials with which the work is done.

What Is Job Satisfaction?

Job satisfaction is the level of contentment a person feels regarding his or her job. This feeling is mainly based on an individual's perception of satisfaction. Job satisfaction can be influenced by a person's ability to complete required tasks, the level of communication in an organization, and the way management treats employees.

Job satisfaction falls into two levels: affective job satisfaction and cognitive job satisfaction. Affective job satisfaction is a person's emotional feeling about the job as a whole. Cognitive job satisfaction is how satisfied employees feel concerning some aspect of their job, such as pay, hours, or benefits.

Important Factors

Typically, five factors can be used to measure and influence job satisfaction:

1. Pay or total compensation
2. The work itself (i.e., job specifics such as projects, responsibilities)
3. Promotion opportunities (i.e., expanded responsibilities, more prestigious title)
4. Relationship with supervisor
5. Interaction and work relationship with coworkers

Importance of Job Satisfaction

After reading about job satisfaction and the factors related to it, you may want to know that why job satisfaction important is. The importance of job satisfaction plays a major role in our occupational life. It has relation with many aspects because it affects a person's

(a) Mental Health:

If a person is remains continuously dissatisfied with the job, the continuous tension leads to much maladjustment in the behavior.

(b) Physical Health:

Job satisfaction affects the physical health of the person. If a person is under continuous stress, he/she will suffer from health problems like headaches, heart and digestion related diseases etc.

(c) Increase in output:

The output automatically increases with job satisfaction because when a person is happy with his job situation, he would like to put more effort in his work, which in turn will increase the output.

Work Motivation & Job Satisfaction

Another phenomenon which is related to one's vocational adjustment is work motivation or in simple words the driving force behind one's work. The success of our organization/ institution depends largely upon the worker's motivation. When the employees of any organization have

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high motivation the output increases. Psychologists studied these factors which increase the motivation towards work and came up with some theories. We will study these theories in brief. Let us start with the theories.

Present study is an attempt to trace out the level of job satisfaction of the working men in industrial Area and the significant difference among the working men engaged in different professions in respect of their job satisfaction has also been studied.

Research Problem

A Comparative study Job satisfaction among the working men in vadodara industrial Area

Research Purpose

The purpose of all this research was to look at different types of vadodara industrial Area and contentment to living on campus. Researchers interested in this area have wanted to determine how well working men fit into the lifestyles and Job satisfaction on campuses.

Objectives

In this research paper Independent variable are Educational Category, Age and Type of salary & dependent variables is Job satisfaction. Following main objective are kept in this research paper.

1. To study the Job satisfaction of working men in vadodara industrial Area.
2. To study the effect of category on Job satisfaction.
3. To study the effect of age on Job satisfaction.
4. To study the effect of salary on Job satisfaction.

Variables Of The Study

DEPENDENT VARIABLES: - Job satisfaction as a dependent variable

INDEPENDENT VARIABLES: - Category, Age, Type Of Salary

1. Type of Category :-

1. open category
2. SC/ST/Baxi category

2. Type Of Age :-

1. Age between 35 to 45 years,
2. Age between 46 to 55 years,
3. Above 56 years

Type of Salary :-

1. Rs.5000 to 10000
2. Above Rs. 10,000

Hypotheses-

1. There will be no significant difference between category (Open and SC/ST/BAXI) in relation to Job satisfaction.
2. There will be no significant difference between type of Age (35 to 45, 46 to 55, Above 56 years) in relation to Job satisfaction.
3. There will be no significant difference between type of salary (Rs.5000 to 10000 and Above Rs.10,000) in relation to Job satisfaction.

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4. There will be no significant difference between category & type of Age in relation to Job satisfaction.
5. There will be no significant difference between type of Age & type of salary in relation to Job satisfaction.
6. There will be no significant difference between type of salary and type of category in relation to Job satisfaction.
7. There will be no significant difference between Category, Age, and Type of salary in relation to Job satisfaction.

Tools

There are 18 statement of Job satisfaction questioner developed by Brefield Roth (1985) (Gujarati Format By Parikh). 9 affirmative and 9 negative items. Five point scale rate is use in this questioner for affirmative word 5,4,3,2, and 1 score is give while for negative word the opposite number 1,2,3,4 and 5 score given. affirmative statement no 1, 2, 5, 7, 9, 12, 13, 16, and 18 also negative statement no 3, 4, 6, 8, 10, 11, 14, 15, and 17. This score range is from 18 to 90. The test retest reliability of the scale is 0.71 (N=50).

Research Design:

2×3×2 factorial research design is for used the research. **Total : 240**

Variable	open category			SC/ST/Baxi		
	Age between 35 to 45 years	Age between 46 to 55 years	Age above 56 years	Age between 35 to 45 years	Age between 46 to 55 years	Age above 56 years
Rs. 5000 to 10000	20	20	20	20	20	20
Above Rs.10000	20	20	20	20	20	20
Total	40	40	40	40	40	40

Sample

To select the sample Type of category, Type of Age, Type of salary were considered as per independent variable taken in this research. Stratified random sampling method was employed of select the unit of sample. Total sample of the present investigation comprised 240 adolescences, in which 120 men were from open category and 120 SC/ST/Baxi category. Both groups entail equal number of Age between 35 to 45, 46 to 55, and Age above 56 years. Again each group was divided by equal number of Rs. 5000 to 10000 salary and above Rs. 10000 up salary. Thus total sample includes 12th components as shown in the following table.

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Statistical Analysis

The data were analyzed as follows; The mean with graphical representation for Type of Category (open and SC/ST/Baxi category), Type Of Age (Age between 35 to 45 years, 46 to 55 years, age above 56 years) and Type of Salary (Rs. 5000 to 10000 and above Rs. 10,000) on working men Job satisfaction was analyzed. A 2x3x2 factorial design was subjected to adequate of statistical analysis viz. technique of Analysis of variance (ANOVA) in order to examine the roll of main variables and to industrial Aria their main as well as interaction effects subsequently on working men's Job satisfaction.

RESULT AND INTERPRETATION

Dependent Variable : Job satisfaction

The aim of the present study was to investigate the effect of category, Type of Age, Type of salary variable on Job satisfaction.

Table 1 ANOVA for Job satisfaction in context of category, Type of Age, Type of salary variable :

SOURCE of variance	SUM OF SQUARE	DF	MEAN SUM OF SQUARE	F	LEVEL OF SIG.
Main effects					
SSA	707.2667	1	707.2667	13.85	0.01
SSB	157.8583	2	78.92917	1.5457	N.S
SSC	6573.067	1	6573.067	128.72	0.01
Interaction effects					
SSAXB	553.0583	2	276.5292	5.4152	0.01
SSBXC	338.8583	2	169.4292	3.3179	0.05
SSCXA	205.35	1	205.35	4.0213	0.05
SSAXBXC	174.925	2	87.4625	1.7128	N.S
SSW	11642.8	228	51.06491		
SST	20353.18	239			

Significance Level

N.S = Not Significant

N	0.05	0.01
(Df1)228	3.87	6.72
(Df2) 228	3.03	4.68

Table 2 F value and mean for Category variable : A

Category	N	Mean	F	Sig. level
A1	120	58.18	13.85	0.01
A2	120	61.61		

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Table 3 F value and mean for Type of Age variable : B

Type Of Age	N	Mean	F	Sig. level
B1	80	60.71	1.55	N.S
B2	80	58.79		
B2	80	60.18		

Table 4 F value and mean for Type of salary variable : C

Type of Salary	N	Mean	F	Sig. level
C1	120	54.65833	128.72	0.01
C2	120	65.125		

Table 5 F value and mean for Category and Type of Age variable : AXB

Variable	Category			
Type Of Age	A1	A2	F	Sig. level
B1	57.35	64.08	5.42	0.01
N	40	40		
B2	56.7	60.88		
N	40	40		
B3	60.48	69.88		
N	40	40		

Table 6 F value and mean for Type of Age and Type of salary variable : BXC

Variable	Type Of Age				
Type of Salary	B1	B2	B3	F	Sig. level
C1	53.8	54.45	55.73	3.32	0.05
N	40	40	40		
C2	67.63	63.13	64.63		
N	40	40	40		

Table 7 F value and mean for Type of salary and type of Category variable : CXA

Variable	Type Of Category			
Type of Salary	A1	A2	F	Sig. level
C1	52.02	57.3	4.02	0.05
N	60	60		
C2	64.33	65.92		
N	60	60		

Table 8 F value and mean for Category, Type of Age and Type of salary variable :AXBXC

Variable	A1			A2			F	Sig. level
	B1	B2	B3	B1	B2	B3		
C1	48.55	52.55	54.95	59.05	56.35	56.5	1.71	N.S
N	20	20	20	20	20	20		
C2	66.15	60.85	66	69.1	65.4	63.25		
N	20	20	20	20	20	20		

MAIN EFFECT

The result reveal at that category, Type of Age, Type of salary variables are all significant at level of 0.01.

Table - 2 shows F value and mean for **Category** variable. In which, mean for open category workers 58.18 and for SC/ST/Baxi category workers is 61.60 and **F value** is **13.85** which is significant at the level of 0.01 Thus, there is a significant difference in Job satisfaction level of among open and SC/ST/Baxi category workers. **In which SC/ST/Baxi category workers have highest mean than other groups, says that they have more good Job satisfaction level than other group.**

Table - 3 shows F value and mean for **Type of Age** variable. In which, mean for Age between 35 to 45 years workers is 60.71, Age between 46 to 55 years age is 58.79 and Age above 56 years is 60.18 and **F value** is 1.55 which is not significant at the level of 0.01. So, there is no significant difference in Job satisfaction level among Age between 35 to 45 years, 46 to 55 years, and above 56 years. **In which Age between 35 to 45 years workers have highest mean than other groups, says that they have more good Job satisfaction level than the other group.**

Then, **table -4** shows F value and mean for **type of salary** variable. In which, mean for Rs. 5000 to 10000 salary is 54.66 and for Above Rs. 10000 salary is 65.13 and **F value** is **128.72** which is significant at the level of 0.01. Therefore, there is a significant difference in Job satisfaction level among Rs. 5000 to 10000 salary and Above Rs. 10000 salary. **In which Above Rs. 10000 salary workers have highest mean than other groups, says that they have more good Job satisfaction level than the other group.**

INTERACTIONAL EFFECT

Table -5 shows F value and mean of **A x B** for interactional effect of category and type of Age variable on Job satisfaction. There were six group in which mean for Age between 35 to 45 years open category workers is 57.35, Age between 46 to 55 years open category workers is 56.7, Age above 56 year open category workers is 60.48, Age between 35 to 45 years SC/ST/Baxi category worker is 64.08, Age between 46 to 55 years SC/ST/Baxi category worker is 60.88 and Age above 56 year up SC/ST/Baxi category men workers is 59.88. Their **F value** is 5.42 which is significant at the level of 0.01. In which Age between 35 to 45 years SC/ST/Baxi category

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workers have highest mean than other five groups. **It means Age between 35 to 45 years SC/ST/Baxi category workers have more good Job satisfaction level than the other groups.**

Table - 6 shows F value and mean **B x C** for interactional effect of Type of age and salary variable on Job satisfaction. There were six groups in which mean for Rs. 5000 to 10000 salary Age between 35 to 45 years is 53.8, Above Rs. 10000 salary Age between 35 to 45 years is 67.63, Rs. 5000 to 10000 salary Age between 46 to 55 years is 54.45, Above Rs. 10000 salary Age between 46 to 55 years is 63.13, Rs. 5000 to 10000 salary Age above 56 years is 55.72 and Rs. 10000 up salary Age 56 years is 64.63. **F value** of these group is **3.32** which is significant. It shows that there is significant difference in any of these five group in Job satisfaction. **In which above Rs. 10000 salary Age between 35 to 45 year have highest mean than other groups, say that they have more good Job satisfaction level than the other group.**

Table – 7 shows F value and mean **C x A** for interactional effect of salary and type of category variable on Job satisfaction. There were four groups in which mean for Rs. 5000 to 10000 salary open category workers is 52.02, Rs. 10000 up salary open category workers is 64.33, Rs. 5000 to 10000 salary ST/SC/Baxi category workers is 57.3 and above Rs. 10000 salary ST/SC/Baxi category worker is 65.92. **F value** for these group is **4.02** which is significant at the level of 0.05. **In which above Rs. 10000 salary ST/SC/Baxi category workers have highest mean than all other groups, says that they have more good Job satisfaction level than the other group.**

Table - 8 shows F value and mean **A x B x C** for interactional effect of category, type of Age and type of salary variable on Job satisfaction. There were twelve group. **F value** of these groups is **1.71** which is not significant at the level of 0.01. **In these groups, SC/ST/Baxi Age between 35 to 45 years above age 56 years worker have highest mean than other eleven groups, says that they have more good Job satisfaction level than the other group.**

CONCLUSIONS

1. There will be significant difference between category (Open and SC/ST/BAXI) in relation to Job satisfaction.
2. There will be no significant difference between type of Age (35 to 45, 46 to 55, 56 up) in relation to Job satisfaction.
3. There will be significant difference between type of salary (5000 to 10000 and 10,000 up) in relation to Job satisfaction.
4. There will be significant difference between category & type of Age in relation to Job satisfaction.
5. There will be significant difference between type of Age & type of salary in relation to Job satisfaction.
6. There will be significant difference between type of salary and type of category in relation to Job satisfaction.
7. There will be no significant difference between Category, Age, and Type of salary in relation to Job satisfaction.

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Conflict of Interests

The author declared no conflict of interests.

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A Study on Multiple Intelligences of Students with Hearing Impairment

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ABSTRACT

Multiple Intelligences emphasizes the training of students to solve problems in their academic life. As students don't learn and achieve in same way, they cannot be assessed in a uniform fashion. Therefore, it is important that a teacher should develop intelligence profiles for each students knowing how each student learn, will allow a teacher to make more informed decisions on what to teach and how to dissipate information. Thus the main purpose of this study is to determine the multiple intelligences of upper primary school students with hearing impairment. A group of 120 students with hearing impairment were selected from the population of primary school students with hearing impairment, using two stage sampling technique. Normative Survey Research method was utilized by the researcher to determine the multiple intelligences of students with hearing impairment. In order to collect data regarding the multiple intelligences of students, the researcher adopted and modified Thomas Armstrong's Multiple Intelligence Scale. Reliability of the modified and translated scale in terms of Cronbach alpha was 0.82. Independent t test and one-way ANOVA were used to analyze quantitatively the collected data. Findings of this study reflect that there is a significant difference in verbal, interpersonal and bodily/kinesthetic intelligences among students with hearing impairment. This study suggested that students should be given training to develop logical and intrapersonal intelligence, in order to enhance their self, and to achieve the set goals in their life.

Keywords: *Multiple Intelligence, Hearing Impairment, Students*

Education is one of the most powerful instruments, which develops intellectual power, it interacts powerfully with adults, peers and the environment, is essential in mediating the learners intellectual development, that learning is a continual transformation of inner perceptions, knowledge and experiences and that all human beings have the potential to continually develop their intellectual powers throughout their lives. John F Kennedy rightly said, "Let us think of

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education as the means of developing our greatest abilities, because in each of us, there is a private hope and dream which fulfilled can be translated into benefit for everyone and greater strength for a nation”.

The purpose of education is not only instilling knowledge, but also discovering human intelligence and guiding students to evolve as well. Schools have often sought to help students develop a sense of accomplishment and self-confidence. Furthermore, if we want our schools to prepare students for the challenges they will face after they leave, we must constantly pose challenges in school that force them to invoke a variety of intelligences. These challenges should have different kinds of solutions, they should involve a variety of intelligences, they should encourage collaboration and they should provide opportunities for reflection (Brauldi, 2000). This can be possible by incorporating Howard Gardner’s Theory of Multiple Intelligences.

Gardner, Howard (2004), the professor of education in Harvard University and Project Zero coordinator, challenged the traditional notion that intelligence is a single capacity possessed by every individual to a greater or lesser extent. He states that “the idea of existence of a number of intelligences resulted in a unique cognitive profile for each individual. This major conception of individual competence is changing, the fate of education in the technological society. Many educators and researchers have explored the practical implications of Multiple Intelligence theory, the powerful notion that there are separate human capacities. According to this theory, human cognitive competence is better described in terms of a set of abilities, talents or mental skills called intelligences (Bansibihari & Pathan, 2004). All normal individuals possess each of these skills to some extent namely individuals differ in the degree of skill and in the nature of their combination. Gardner is of the view that such a theory has important educational implications including ones for curriculum development. Gardner first outlined his theory in his 1983 book *Frames of Mind: The Theory of Multiple Intelligences*, where he suggested that all people have different kinds of “intelligences”.

Gardner proposed that there are eight intelligences, and also suggested the possible additions of a ninth known as “existentialist intelligence” The eight intelligences, which are proposed by Howard Gardner are Verbal/linguistic Intelligence, Logical/mathematical Intelligence, Visual/spatial Intelligence, Bodily/kinesthetic Intelligence, Musical/Rhythmic Intelligence, Interpersonal Intelligence, Intra personal Intelligence, and Naturalistic Intelligence. The multiple intelligences play an important role in determining the academic achievement of student. These intelligences, which influence the achievement, were explored by many researchers, scholars and academicians around the world. But significant works in this area have not been done and even the reported studies in the present area do not cover the possible differences in multiple intelligences among students with hearing impairment. The knowledge obtained from this context would be of much value in obtaining a theoretical understanding of the extent of the influence of non-intellectual factors which control the achievement of students with hearing

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impairment and it need to be studied. Hence the researcher aimed to study the multiple intelligences of students with hearing impairment.

Objectives Of The Study

1. To determine the multiple intelligences of students with hearing impairment
2. To understand the difference in multiple intelligences among students with hearing impairment with respect to gender, medium of instruction, degrees of hearing loss, types of hearing loss.

Hypothesis Of The Study

1. There is a significant difference in multiple intelligences and its dimensions between boys and girls student with hearing impairment
2. There is a significant difference in multiple intelligences and its dimensions between students from Tamil and English medium of instruction classrooms
3. There is a significant difference in multiple intelligences and its dimensions among students with different degrees of hearing loss
4. There is a significant difference in multiple intelligences and its dimensions among students with different types of hearing loss

METHODOLOGY

Methodology of the study refers to the plan or design which is carried out to find the answer for research questions and testing the hypotheses in the study (Cohen, Louis, Manin, Lawrence, & Morrison, Keith. 2013). It refers to the theory of getting knowledge, to the consideration of the best ways, methods or procedures, by which data that will provide the evidence basis for the construction of knowledge (Creswell, W. John, & Clark, Plano. 2013). The methodology of this study comprises of research method, population and sampling, survey instrument used in this study, procedure of data collection and data analysis.

Research Method

A research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. In fact, it constitutes the blueprint for the collection, measurement and analysis of data (Kothari, 2012). In this study, the researcher utilized survey research design to understand the multiple intelligences among upper primary school students with hearing impairment.

Participants

A group of five secondary and higher secondary schools for deaf/hearing impaired was selected using simple random sampling technique. From the selected each school, all students with hearing impairment, who are studying sixth to eighth standard were selected as samples for this study. The total numbers of upper primary students with hearing impairment from the selected

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schools were 120. Thus the sample for the present study consisted of 120 students with hearing impairment.

Survey Instrument Used

Data were collected by means of a scale consisting of demographic characteristics and statements related to Thomas Armstrong Multiple Intelligences Scale. It is a self-reported instrument using 80 items, five point, Likert scale, (Strongly Agree to Strongly Disagree). In the demographic section, the students with hearing impairment had to report their sex, type of hearing loss, degree of hearing loss and medium of instruction. This scale was adopted and modified and translated into Tamil language and finally validated by the researcher. Reliability of the modified scale was estimated by Cronbach Alpha and it was found to be 0.82.

Procedure Of Data Collection And Analysis

The multiple intelligence scale was administered to 120 upper primary school hearing impaired students. After getting due permission from the principals of deaf schools, the researcher visited each school for hearing impaired for collecting data. Upper primary school students with hearing impairment were requested to enter their name, sex, type of hearing loss, and medium of instruction in the place provided in the scale. Instructions were also directed in the first page of the scale and students were requested to follow those instructions, while responding to the items in the scale. School students with hearing impairment were further requested and advised not to leave any statements in the scale. Students were also assisted and helped by their class teachers to fill the scale. 120 set of tools were distributed to the upper primary school students with hearing impairment, selected as mentioned earlier in the sample and sampling procedure. 120 set of tools properly filled in were received back. Hence 120 sets of tools were scored according to the scoring procedure explained in the study. For the analysis and interpretations of the data, the researcher utilized t test, one-way ANOVA and product moment correlation.

FINDINGS AND RESULTS

Demographic Characteristics Of Students With Hearing Impairment

Table 3.1: Demographic Characteristics Of Upper Primary School Students With Hearing Impairment

Samples	Sub-Samples	Frequency	Percentage
Gender	Male	72	60.0
	Female	48	40.0
Medium of Instruction	English	33	28.0
	Tamil	87	73.0
Degrees of hearing loss	Moderately Severe	23	19.0
	Severe	32	27.0
	Profound	65	54.0
Type of hearing loss	Conductive hearing loss	43	35.8
	Sensorineural hearing loss	56	46.6
	Mixed hearing loss	21	17.6

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There were 72 (60%) male students with hearing impairment and 48 (40%) female students with hearing impairment. The majority of students are males with hearing impairment. In the case of medium of instruction category, 87 (73%) hearing impaired students are from Tamil medium of instruction schools and 33 (28%) hearing impaired students are from English medium of instruction. In degrees of hearing loss category, 23(19%) students had moderately hearing loss, 65 (54%) students had severe hearing loss and 65(54) students had profound hearing loss and in the case of type of hearing loss category, 43 (35.8%) students had conductive hearing loss, 56 (46.6%) students had Sensorineural hearing loss, whereas 21(17.6%) hearing impaired students had both conductive and Sensorineural hearing loss.

HYPOTHESIS 1

Ho: There is a significant difference in multiple intelligences and its dimensions with respect to gender.

Table 3.2 Differences In Overall Multiple Intelligences And Its Dimensions With Respect To Gender

S.No	Variables	Gender/Sex				t
		Boys		Girls		
		Mean	SD	Mean	SD	
1	Verbal	33.83	7.04	36.02	7.01	4.785*
2	Logical	34.02	7.09	33.75	6.75	0.607 ^{NS}
3	Visual	30.70	6.58	30.40	6.46	0.721 ^{NS}
4	Bodily	33.48	6.84	34.35	6.49	1.987*
5	Musical	31.50	7.51	31.27	7.19	0.494 ^{NS}
6	Interpersonal	30.67	6.19	30.41	5.68	0.670 ^{NS}
7	Intrapersonal	32.48	6.23	33.47	6.11	2.449*
8	Natural	30.24	6.02	30.73	5.70	1.276 ^{NS}
9	Whole Sample	256.94	38.49	260.40	36.81	1.406 ^{NS}

*Significant at 0.05 level

NS = Not significant at 0.05 level

It is inferred that the calculated t values 4.785, 1.987, and 2.449 for verbal intelligence, bodily or kinesthetic intelligence and interpersonal intelligence respectively were found to be insignificant at 0.05 levels. Since the calculated t values are greater than the table value 1.960 at 0.05 levels, the null hypothesis is rejected for the dimensions of multiple intelligences namely verbal, bodily and interpersonal intelligences and hence it is concluded that there is a significant difference or variation between boys and girls in their verbal intelligence, bodily or kinesthetic intelligence and interpersonal intelligence. Further it is also inferred that the calculated t values 0.607, 0.721, 0.494, 0.670, 1.276 and 1.406 respectively for logical intelligence, visual intelligence, musical intelligence, intrapersonal intelligence, natural intelligence and multiple intelligences were found to be insignificant at 0.05 levels. Since the calculated t values are lesser than the table value 1.960 at 0.05, the null hypothesis accepted for the dimensions of multiple intelligences namely logical intelligence, visual intelligence, musical intelligence, intrapersonal intelligence, natural

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intelligence and overall multiple intelligences and hence it is concluded that there is no variation between boys and girls in their logical intelligence, visual intelligence, musical intelligence, intrapersonal intelligence, natural intelligence and overall multiple intelligences. Mean differences indicates or revealed that girl students with hearing impairment are far better than male students with hearing impairment in their verbal intelligence, bodily/kinesthetic and interpersonal intelligence.

HYPOTHESIS 2

Ho: There is a significant difference in multiple intelligences and its dimensions between students from Tamil and English medium of instruction

Table 3.3 Differences In Overall Multiple Intelligences And Its Dimensions With Respect To Medium Of Instruction

S.No	Variables	Medium of Instruction				t
		Tamil		English		
		Mean	SD	Mean	SD	
1	Verbal	35.86	7.21	34.23	6.94	3.522*
2	Logical	34.12	6.82	33.69	7.00	0.932 ^{NS}
3	Visual	30.09	6.84	30.91	6.23	1.922 ^{NS}
4	Bodily	30.64	5.81	30.46	6.02	0.456 ^{NS}
5	Musical	31.03	7.17	31.66	7.48	1.296 ^{NS}
6	Intrapersonal	34.25	7.05	33.67	6.35	1.328 ^{NS}
7	Interpersonal	33.47	6.30	32.61	6.07	2.126*
8	Natural	30.66	6.05	30.36	5.71	0.779 ^{NS}
9	Whole Sample	260.12	38.92	257.59	36.60	1.023 ^{NS}

*Significant at 0.05 level

NS = Not significant at 0.05 level

It is inferred that the calculated t values 3.522 and 2.126 for verbal intelligence and interpersonal intelligence were found to be insignificant at 0.05 level. Since the calculated t values are greater than the table value 1.960 at 0.05 level, the null hypothesis is rejected for verbal and interpersonal intelligences and concluded that there is a significant variation or difference between students from Tamil and English medium of instruction classrooms. This result indicates that students with hearing impairment from Tamil and English medium of instruction classrooms significantly differ in their verbal and interpersonal intelligences. Mean scores indicates that students from Tamil medium of instruction classroom are better in their verbal and interpersonal intelligence than their counterpart students from English medium of instruction classroom. Further, from the table 3.3, it is inferred that the calculated t values 0.932, 1.922, 0.456, 1.296, 1.328, 0.779 and 1.023 respectively for logical, visual, bodily, musical, intrapersonal, natural and overall multiple intelligences were found to be insignificant at 0.05 level. Since the calculated t values are lesser than the table value 1.960 at 0.05 level, the null

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hypothesis is accepted for the dimensions namely logical, visual, bodily, musical, intrapersonal, natural intelligences and overall multiple intelligences and concluded that there is no significant variation between students from Tamil and English medium of instruction classroom in their logical, visual, bodily, musical, intrapersonal, natural intelligences and overall multiple intelligences. Moreover mean scores also suggests that students with hearing impairment from Tamil and English medium of instruction classroom not significantly differ in their logical, visual, bodily, musical, intrapersonal, and natural intelligences.

HYPOTHESIS: 3

Ho: There is a significant difference in multiple intelligences and its dimensions among students with different degrees of hearing loss

Table 3.4 Differences In Overall Multiple Intelligences And Its Dimensions With Respect To Degrees Of Hearing Loss

S.No	Variables	Degrees of Hearing Loss						F
		Moderate		Severe		Profound		
		Mean	SD	Mean	SD	Mean	SD	
1	Verbal	34.00	7.57	37.28	6.80	34.14	6.93	18.922*
2	Logical	34.54	7.38	34.49	6.42	33.49	7.01	2.423 ^{NS}
3	Visual	30.74	7.47	30.31	6.47	30.61	6.35	0.239 ^{NS}
4	Bodily	30.42	6.41	30.74	5.59	30.47	5.98	0.209 ^{NS}
5	Musical	31.00	7.68	31.27	6.77	31.50	7.53	0.259 ^{NS}
6	Intrapersonal	33.75	7.63	34.79	6.69	33.58	6.44	2.908 ^{NS}
7	Interpersonal	32.92	6.47	34.20	6.08	32.48	6.11	6.850*
8	Natural	30.22	6.82	31.25	5.53	30.22	5.78	2.833 ^{NS}
9	Whole Sample	257.6	42.52	264.3	36.05	256.4	37.14	3.863*

*Significant at 0.05 level

NS = Not significant at 0.05 level

It is inferred that the calculated F values 18.922, 6.850 and 3.863 for verbal, interpersonal intelligences were found to be insignificant at 0.05 levels. Since the calculated F values are greater than the table value 2.990 at 0.05 level, the null hypothesis is rejected for the dimensions namely verbal, interpersonal and overall multiple intelligences and concluded that there is no significant variation among students with different degrees of hearing loss in their verbal, interpersonal and overall multiple intelligences. Mean scores also indicated that students with severe hearing loss are far better in their verbal, interpersonal intelligence and multiple intelligences than their counterparts namely students with moderate and profound hearing loss. Further it is inferred from the table 3.4 that the calculated F values 2.423, 0.239, 0.209, 0.259, 2.908 and 2.833 for logical, visual, bodily, musical, intrapersonal and natural intelligences were found to be insignificant at 0.05 levels. Since the calculated F values are lesser than the table value 2.990 at 0.05 levels, the null hypothesis is accepted for the dimensions namely logical,

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visual, bodily, musical, intrapersonal and natural intelligences and concluded that there is no significant variations among students with different degrees of hearing loss in their logical, visual, bodily, musical, intrapersonal and natural intelligences. Mean scores also indicated that the students with moderate, severe and profound hearing loss do not differ significantly in their logical, visual, bodily, musical, intrapersonal and natural intelligences.

HYPOTHESIS 4

Ho: There is a significant difference in multiple intelligences and its dimensions among students with different types of hearing loss

Table 3.5 Differences In Overall Multiple Intelligences And Its Dimensions With Respect To Type Of Hearing Loss

S.No	Variables	Degrees of Hearing Loss						F
		Conductive		Sensorineural		Mixed		
		Mean	SD	Mean	SD	Mean	SD	
1	Verbal	30.27	5.96	30.59	5.87	30.72	5.61	0.430 ^{NS}
2	Logical	31.50	7.39	30.80	7.40	32.48	6.96	3.234 [*]
3	Visual	30.14	6.19	30.59	6.81	31.29	6.44	1.811 ^{NS}
4	Bodily	30.35	6.20	30.55	5.82	30.89	5.57	0.498 ^{NS}
5	Musical	33.59	7.11	34.12	6.82	33.92	6.71	0.565 ^{NS}
6	Interpersonal	33.63	6.70	33.96	6.81	34.47	6.27	0.934 ^{NS}
7	Intrapersonal	32.91	6.09	33.11	6.31	32.85	6.10	0.151 ^{NS}
8	Natural	34.58	7.22	35.36	7.09	34.81	6.82	1.193 ^{NS}
9	Whole Sample	257.00	37.50	259.11	37.86	261.47	37.50	0.853 ^{NS}

*Significant at 0.05 level

NS = Not significant at 0.05 level

It is inferred that the calculated F value 3.234 for logical intelligence was found to be significant at 0.05 levels. Since the calculated F value is greater than the table value 2.990 at 0.05 levels, the null hypothesis is rejected for the dimension logical intelligence and concluded that there is a significant difference or variation among students with different types of hearing loss in their logical intelligence. Mean scores indicates that students with mixed hearing loss is better in their logical intelligence than their counter parts namely students with conductive and sensorineural hearing loss. Further, it is inferred that the calculated F values 0.430, 1.811, 0.498, 0.565, 0.934, 0.151, 1.193 and 0.853 for verbal, visual, bodily, musical, interpersonal, intrapersonal, natural and overall multiple intelligences were found to be insignificant at 0.05 levels. Since the calculated F values are lesser than the table value 2.990 at 0.05 levels, the null hypothesis is accepted and concluded that there is no significant variations among students with different types of hearing loss in their verbal, visual, bodily, musical, interpersonal, intrapersonal, natural and multiple intelligences.

DISCUSSION

The highest scores on the dimensions of multiple intelligences among upper primary school students with hearing impairment were obtained for verbal and interpersonal intelligences. This is quite interesting to understand that upper primary school students with hearing impairment verbally developed and they communicated well with teachers and other students in their schools and classrooms. Whereas, the other areas of intelligences namely, logical, visual, musical, bodily, musical, intrapersonal intelligences were the less developed areas among the upper primary school students with hearing impairment. This pattern indicates that there is a need for up gradation of curriculum and teaching strategies that benefits the students with hearing impairment.

Girl students with hearing impairment do score more in verbal, interpersonal and kinesthetic intelligences than boy students with hearing impairment. This could be due to better interpersonal relationship of girls, with better adaptation ability. Several studies support the view that there is a significant development among girl students with hearing impairment in their verbal and interpersonal intelligences. Ravi, R. & Vedapriya, S. Gethsi. (2009) in a similar study, concluded that gender was not a significant factor in determining multiple intelligences. The present study result also indicated that gender was not a significant factor in determining multiple intelligences. However, other studies namely Saricaoglu, Aysel. & Arikan, Arda. (2009) and Asha (2007) found that girl students were inclined to have more in the verbal, interpersonal and bodily intelligences than their male counterparts.

Students studying in schools, where medium of instruction are English language, displayed significantly less development in verbal and interpersonal intelligences than students with hearing impairment from Tamil medium school. This could be due to the regional language influence. Learning conditions in Tamil medium of instruction classroom are more liberal when compared to English medium of instruction classrooms, and teachers are more functional and effective, because their cultural factor such as language ethnicity influence their teaching and tend towards the education of hearing impaired. This could be the reason for higher scores among students with hearing impairment from Tamil medium of instruction classrooms.

Students with moderate and profound hearing loss showed a less development in their verbal and interpersonal intelligence than students with severe hearing loss. This could be due to the fact that the students become more aware about the importance of language and communication and this could create a high verbal and interpersonal intelligence among students with severe hearing loss. No study was in agreement with this finding; moreover no such studies were conducted in this area.

Students with mixed hearing loss were scored more in logical intelligence than their counter parts students with conductive and sensorineural hearing loss. It is possible that those who have

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both the conductive and sensorineural hearing loss could have greater exposure to logical intelligences than verbal intelligences. This was in congruence with studies done by Ogundiran, Olawale, & Olaosun, Adedayo O. (2013). However, others have found that students with mixed hearing loss showed less development in multiple intelligences.

CONCLUSION

The results or findings of this study indicated that the students with hearing impairment are good in verbal intelligence or strategies they employ in learning language and interpersonal relationship or communication skills, further they are also good in kinesthetic intelligence. This trend indicates that the special education set up provides a quality education in terms of language and communication. Moreover they were trained to use the gadgets and equipments to learn the lessons effectively. These findings suggested that students with hearing impairment should be given training to develop the other areas of Gardner's multiple intelligences namely logical and intrapersonal intelligence. These intelligences could develop their self and also enhance students to be competitive in the technological society.

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Conflict of Interests

The author declared no conflict of interests.

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Attitude of Secondary Student-Teachers under Jurisdiction of Bangalore University towards Teaching Practice

Mr. Prasadappa. Y. N^{1*}, Dr. M.S. Talawar²

ABSTRACT

Teaching practice occupies a key position in the programme of teacher education. It is the practical use of teaching methods, strategies, principles, techniques and practical training and practice or exercise of different activities of daily school life. Practice teaching sometimes becomes a demoralizing and sometimes very frightening experience for the student teachers. In this context this study was identifies both positive and negative attitude of student teachers during practice teaching and based on the finding of this study, measures were suggested on how to improve practice teaching.

Keywords: *Attitude, Teaching Practice, Trainee Teachers.*

Education is one of the most powerful instruments for development. It is the key to progress and development for the human species, its interface with sustainable development in all human society today cannot be over emphasized. Developing countries face barrage of extraordinary problem among which are abject mass poverty, superstition, sanitation, illiteracy, corruption etc. The solution of course, lies in proper education of the masses. Thus education according to Nelson Mandela it is most powerful weapon which you can use to change the world. It is key to reducing poverty, to creating sustainable planet. Okafor (1991) speaking about the secret of America's power, pointed out that America built her greatness in the classroom. Developing country India in particular should emulate this.

The role of the teacher in sustainable development cannot be quantified, especially in training personnel in various areas of the workforce. however ,the teacher needs to be properly educated and trained for professional efficiency and inculcated with a positive attitude that will enable teacher go through the training properly and come out well equipped for the responsibility ahead. Many countries have solved many of their problems through education and the secret lay

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in effective classroom activities. Today the secret of America's greatness emerged from the classroom. Professors place high premium on teaching practice because it enables the students' practicalize all the theoretical teachings on the education's principles and practice. Taneja (2000) pointed out that number of terms, such as the practice teaching, field studies, in-field experience, school based experience or internship are used. In view of this, teaching practice occupies a key position in the programme of teacher education and also it is a common professional element in preparation of teachers. It is the first official opportunity for trainee teacher to involve in actual teaching experience. Ashraf (1999) noted that the term teaching practice embraces all the learning experience of student teachers in schools. Marais and Meier (2004) pointed that the term practice teaching represents the range of experiences to which student-teachers are exposed whom they work in classrooms and schools.

Teaching practice is an important component of becoming a teacher. It grants student teachers experience in the actual teaching and learning environment. Teaching practice is the name of the preparation of student teachers for teaching by practical training. It is the practical use of teaching methods, teaching strategies, teaching principles, teaching techniques and practical training and practice or exercise of different activities of daily school life. One of the main objectives of teaching practice, as Salzillo and Van Fleet (1977-28) point out is that encouraging an appropriate professional socialization process for the future teacher. However despite its importance, Killen and Steyn (2001) note that teaching practice sometimes becomes a demoralizing and sometimes very frightening experience for the student teachers?

Several studies have been conducted on student teacher's experience and anxieties during teaching practice (Ngidi and Sibaya 2003, Marais and Meier 2004) to mention but two. However a review of the literature indicates that there are limited studies that have been conducted regarding ways in which students experience during teaching practice influence their perception of and attitudes towards teaching practice. In this study identifies both the positive and negative experience of student teachers during teaching practice and based in the finding of this study, measures were suggested on how to improve practice teaching.

Statement of the problem

The problem chosen for the study may be stated as "Attitude of Student-Teachers towards Teaching Practice in the Bangalore University"

Objectives of the Study

The objectives of this study is to ascertain the attitude of the students in colleges of Education in Bangalore University towards teaching practice as an impetus for their professionalization. Specifically, the study sought to:

1. Determine the attitude of the student teachers towards teaching practice.

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2. Identify the problems facing practical teaching and its related activities in Bangalore university.
3. Identify strategies for improvement in the attitude of the student teachers.

Research Questions

1. What is the attitude of the student teachers towards teaching practice?
2. What are the problems facing practical teaching and its related activities in Bangalore university?
3. What are the strategies for improving the attitude of student teachers towards teaching practice?

RESEARCH METHODOLOGY

Design of the study

The design of the study is a descriptive survey which attempts to collect data from members of a population in order to determine the current status of the population.

Area of the Study

The study was carried out in colleges of education in Bangalore university

Population of Study

The target population comprised of all the students in secondary teacher education level in Bangalore University who were on teaching practice, all the principals and teachers of the school used for teaching practice.

Sample and Sampling Techniques

The sample were selected through Simple balloting was used to choose 50 students from each of the three colleges of education who were on teaching practice, 10 principals and 20 teachers of the schools used for teaching practice. The total sample used for the study was 180.

Tools for Data Collection

The student Teachers and Teaching Practice (STTP) attitude scale designed and standardized by A.U.NwanekeZi, N.J. Okali and Sam.A.Mezieobi's has been used in the research study for the collection of the data. The tool was face validated by two experts in Education Science and Education Foundation. The reliability of 0.87 (87%) was calculated using Cronbach Alpha technique. This value was deemed appropriate for the study.

Method of Data Analysis

Descriptive data analysis (mean and decision) were used to answer the research questions. A mean of 2.50 and above indicates agreement with the item statement while a mean of 2.49 and

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below indicate disagreement. For ease of analysis of the research question 1, a mean of 2.50 and above was regarded as positive attitude while 2.49 and below was regarded as negative attitude. In research question 2 and 3, a mean of 2.50 was taken as “agree” 2.49 and below as “disagree”.

RESULTS AND DISCUSSION

The results were presented in line with the research questions

Table 1 (a): Mean Ratings of the 300 and 200 Level Student Teachers on Their Attitude towards Teaching Practice

S/No	Items on the Attitude of Student Teachers Towards Teaching Practice	Secondary level T/P students
1	Teaching practice is very good experience and should be allowed to continue	3.58 positive
2	Teaching practice is a fun and should be extended to 6 months.	2.85 positive
3	I have never been absent from my school location since I was posted	3.27 positive
4	I am always regular to school	3.48 positive
5	I am always there at my school location whether I have period to teach or not	3.38 positive
6	I am always ready with my lesson notes	3.43 positive
7	I like to teach my lesson than watching the regular teacher use my period	3.22 positive
8	I prefer being supervised by my teachers	3.32 positive
9	I have mutual understanding with my students and the school authority	3.27 positive
10	I teach all my lessons with instructional materials	3.46 positive

In table 1, the mean ratings of the secondary teacher education level students show that the respondents scored up to 2.50 and above showing that they have positive attitude in all the listed items.

Table 1 (b): Mean rating on the observed attitude of the secondary teacher education level students towards Teaching Practice by the Practicing Schools

S/No	Observed attitude of the students towards Teaching Practice		
	The following attitude were observed in the students during Teaching Practice	Principal	Teachers
11	Prompt report to the school location	2.22 Negative	2.00 Negative
12	Diligent to duty	3.27 positive	3.12 positive
13	Regularity to school	3.46 positive	3.23 positive
14	Punctuality to school	2.44 Negative	2.02 Negative
15	Resourceful	2.35 Negative	2.29 Negative
16	Good relationship with teachers and students	3.48 positive	2.70 positive

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S/No	Observed attitude of the students towards Teaching Practice		
17	Obedient/respect to school authority	3.48 positive	3.67 positive
18	Readiness to take instruction/corrections	3.26 positive	3.30 positive
19	Decency in dressing	3.36 positive	3.10 positive
20	Ability to teach	2.11 Negative	2.24 Negative

Table 1 (a) reveals that the mean ratings of the students showed that the respondents scored up to 2.50 and above (Table 1 (b)) showing that they have positive attitudes in all the listed items except in 15 and 20 where the principals and teachers scored below acceptable mean (2.35 and 2.29) and (2.11-2.24) respectively.

Table 2: Mean Ratings on the Problems Facing Teaching Practice in the Bangalore University

S/No	Items on the problem facing teaching practice	Secondary level T/P students
	The following are the problems facing teaching practice in University of Bangalore	
21	Inadequate preparation of students for teaching practice	2.71 Agree
22	Lack of necessary equipment, facilities and materials for preparation of the students before sending them out for teaching practice	2.50 Agree
23	Unwillingness of the students to report to their school locations	2.37 Disagree
24	Few number of practicing schools within Bangalore	2.67 Agree
25	Poor learning environment in the practicing schools, such as class congestion, poor ventilation, poor facilities and equipment	2.60 Agree
26	Lack of accommodation for the student teachers especially those posted very far from the colleges of education.	2.49 Disagree
27	Short practicing period	2.90 Agree
28	Rejection of students by some schools	2.64 Agree
29	Lack of transportation fare on the part of the student teachers	2.61 Agree
30	Inaccessibility of some school locations by students and lecturers	2.65 Agree

Table 2 reveals that the mean ratings of the student's shows that the respondents scored up to 2.50 and above, showing that all the respondents agreed that all the listed items are the problems facing teaching practice.

Table 3: Rating on Strategies for Improving Students Attitude towards Teaching Practice

s/no	Items strategies to improve the attitude of the students towards teaching practice	Secondary level T/P students
	The following strategies should improve the attitude of the students towards teaching practice	

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s/no	Items strategies to improve the attitude of the students towards teaching practice	Secondary level students T/P
31	Students should be well prepared before posting to schools	3.22
32	Micro-teaching laboratory should be put in place and be used to groom the students well enough before posting to schools	2.23
33	As much as possible students should be sent to good schools, considering the accessibility and nearness to the college/institution	3.19
34	College/Institution should give each practicing students some financial support for their upkeep during the period of teaching practice	2.19
35	The college/institution buses should be used to convey the students to their various school locations	3.04
36	The school authority should liaise with far school locations to arrange accommodation for the students	2.96
37	Lecturers should not collect gifts either in form of money or materials from the students	3.08
38	Lecturers should inform the students when they want to visit each school for supervision	2.72
39	Teaching practice handbook should be made available to students	2.10
40	Students should be briefed before reporting to their school locations	3.16

Table 3 reveals that the mean responses of the secondary teacher education level students reached to the acceptable mean of 2.50 and above. This is an indication that all the designated strategies should be adopted for improvement in the attitude of the students on teaching.

DISCUSSION OF THE FINDINGS

In the table 1, the mean ratings of the respondents secondary teacher education level students, the principals and teachers indicated generally that the students have positive attitude towards teaching practice except that some would not report promptly to their school locations and sometimes they would not be punctual to school. and also sometimes they would not resourceful in ability to teach in school. This might be due to inaccessibility of some school locations, far distance and sometimes traffic congestion in town and also teaching aid due to inaccessibility of some colleges of education and schools.

In Table 2, the mean ratings of the secondary teacher education level students indicated agreement that all the listed items are problem facing teaching practice in the Bangalore University.

In response to research question 3, the respondents agreed that all the stipulated strategies would be adopted to ensure positive attitude by the students towards teaching practice. This shows that the students are unanimous in their mean ratings. One could therefore conclude that if all the

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stated strategies would be adopted, no doubt, the student's attitude towards teaching practice will be affected positively.

CONCLUSION

The attainment of quality education will be a mirage without adequate preparation of manpower who will dispense the knowledge. This calls for serious consideration of stipulated strategies to be adopted.

RECOMMENDATIONS

In order to build positive attitude of students towards teaching practice in Bangalore University, we recommended as follows:

1. Colleges of Education should have a micro-teaching laboratory where students will be well exposed to the rudiments of teaching.
2. There should be teaching practice handbook for the students to have a uniform method of writing lesson notes. Rules and regulations of practical teaching will also be stipulated in this hand book.
3. Students should be sent to good schools with suitable learning environment.
4. The school location should be accessible both for lecturers and students.
5. Secondary Teacher Education Institutions shall collaborate with corporate sector in teaching practice programme so as to seek financial support for the said programme.

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Conflict of Interests

The author declared no conflict of interests.

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Effects of Social Support and Socioeconomic Status on Mental Health in College Students

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ABSTRACT

Mental Health plays a very significant role to decide the quality of life. In the present competitive scenario students feel stress and face mental illness which is becoming very severe with time. In present investigation effort has been made to ascertain the effect of Social Support and Socioeconomic Status on Mental health in College Students. A 2x3 factorial design was employed. The two factors studied were: Social Support (varied at two level high and low) and socioeconomic status (varied at three level high, middle & low). There were six cells with 30 subjects in each cell (total sample consisted of 180 subjects and age range 18-22 years). Measurement of Mental Health was furnished through Mental Health Battery developed by Arun Kumar Singh & Alpnana Sen Gupta. Social Support and Socioeconomic status was also collected by a self-made questionnaire. **Result:** Result of ANOVA show the main effect of Social support and Socioeconomic Status were found significant ($p < .01$) on total mental health scores.

Keywords: *Mental Health, Social Support And Socioeconomic Status.*

Mental health is a central determinant to decide the quality of life. A growing body of evidence indicates that mental disorders are becoming increasingly numerous and serious among college students in developing countries like India. India has one of the highest suicide rates in the world and recent studies suggest about 40 percent are adolescents. At least 125 people aged 29 years or below are committing suicide every day and 51 per cent of the total suicide victim are graduates, college students or younger (Times of India, 2010). Mental health is an expression of emotions and signifies a successful adaptation to a range of demands. The World Health Organization defines mental health as "a state of well-being in which the individual realizes his or her own abilities to cope with the normal stresses of life and working productively so that he or she will be able to make a contribution to his or her community." WHO stresses that mental health "is not just the absence of mental disorder". Mental health refers to a person's health of

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the mindedness. Good mental health can enhance one's life, while poor mental health can prevent someone from living a normal life. The consequences of these problems are likely to be significant and lasting, as mental disorders in early adulthood are associated with alcohol and substance abuse (Angst, 1996; Weitzman, 2004), academic success (Kessler, Foster, Saunders, & Stang, 1995), and future employment and relationships (Ettner, Frank, & Kessler, 1997; Kessler, Walters, & Forthofer, 1998). Also without emotional support, mental health is at risk. Mental health of a person depends on Social support such as family, friends, relatives and socioeconomic status.

Mental health and Social support

Social support is the physical and emotional comfort given to us by our family, friends, co-workers and others. Friends, family, and significant others can provide instrumental, informational, or emotional assistance (House, Umberson, & Landis, 1988). This assistance is commonly referred to as social support and is considered a psychosocial coping resource that positively affects individuals' personal resources such as self-esteem and self-efficacy and buffers the negative effects of stress (Thoits, 1995).

There is good evidence that social support plays an important role in mental health or substance use problems. For example, people who are clinically depressed report lower levels of social support than people who are not currently depressed. Two types of social support: the structural and functional social support. Structural support refers to the existence and quantity of relationships, whereas functional support refers to the perceived quality of social relationships. Both structural and functional social support have been found to be associated with mental health (Seeman, 1996; Son, Lin, & George, 2008; Thoits, 1995).

Understanding the relationship between mental health and social support is of particular importance among college student populations. The recently defined period of emerging adulthood (18 -25 years of age) is characterized by change and exploration and is a crucial time for identity development (Amett, 2000). During this period of transition to adulthood, and youth attend some form of postsecondary educational institution. These students face an entirely new social environment characterized by greater freedom and less adult supervision (Lefkowitz, 2005) and frequently report homesickness, friend sickness, a sense of isolation, and increased interpersonal conflict (Boute et al., 2007).

Social support can influence emotional health and wellbeing (Kawachi & Berkman, 2001). An extensive literature, examining a variety of populations, documents strong associations between social support and mental health (Berkman, Glass, Brissette, & Seeman, 2000; Caron, Latimer, & Tousignant, 2007; Coyne & Downey, 1991; House et al., 1988; Kawachi & Berkman, 2001; Leung, Chen, Lue, & Hsu, 2007; Seeman, 1996; Thoits, 1995). For example, psychologically distressed persons are consistently found to be more socially isolated (Kawachi & Berkman,

2001; Seeman, 1996), and less contact with friends, lack of a partner or someone to confide in, and feeling alone are also correlated with higher levels of psychological distress (Coyne & Downey, 1991; Durden, Hill, & Angel, 2007; Stravynski, & Boyer, 2001). Recently social support was found to have a stronger relationship with psychological distress than conditions of poverty (Caron et al., 2007).

Mental health and Socio-economic status

Socioeconomic status is commonly conceptualized as the social standing or class of an individual or group. It is often measured as a combination of education, income and occupation. Mental health, health status and socioeconomic status are important determinants of an individual's wellbeing. Lower socioeconomic status is associated with decreased social network size and lower social integration (House et al., 1988; Thoits, 1995). Poor health and poor mental health can reduce earnings ability, through their effects on education and employment, and poverty can lead to lower educational attainment, poorer physical health and depression.

Das et al. (2007) examine the correlates of mental health in five developing countries, finding that being older, female, widowed, and in poor physical health are consistently related to poorer mental health outcomes. . However, their reading of their evidence on the relationship between socio-economic status (SES) and mental health is mixed. They find education to be positively associated with better mental health in a majority (but not all) of the countries that they study. A survey of 11 smaller community based studies in six low and middle income countries finds a negative association between education and common mental disorders in all but one study (Patel & Kleinman 2003). Results for other indicators of socioeconomic status such as employment and income were more mixed.

Both mental health and somatic health show a social gradient, with the prevalence of illness increasing by a decreasing socio-economic status (Dalgard 2008 & Koster et al. 2006). A low socio-economic status is also associated with low social support, and a lack of support explains some of social gradient in mental health. Especially in older adults, a deterioration in financial status is known to be a stressful event, and those who are economically disadvantaged more likely to experience persistent depressive symptoms (Morjtabai & Olfson 2009). Therefore, socio-economic status was taken into consideration as a possible confounder when analysing the relationship between social support and psychological distress, with income maintaining its position as an independent protective factor for psychological distress, also when adjusted for health and social support in the final multivariate model. Associations between education, marital status, district of town and psychological distress become non-significant in the multivariate analyses when adjusting for all items. This confirms the assumption that financial strain is a source of psychological distress for many older adults (Rostad et al. 2009, Ferraro 1999) and that the challenge of social inequalities in health is also present in the elder age groups.

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In this material, the odds ratio is 3 for economic problem for experiencing high levels of psychological distress among those with poor somatic health (level of significance 1 percent). In planning structural initiatives targeting psychological distress as a public health issue, it is important to avoid less involved than those who are better socially positioned. This implies that such activities should be free of charge.

Purpose of the study:

This study aimed to examine the effects of social support and socio-economic status on mental health through mental health battery by Singh et.al.

Research Design:

Researcher wishes to know the impact of social support and socioeconomic status of college students. To study two independent variables (social support & socioeconomic status). A 2x3 factorial designed is employed. In this study one variable has 2 levels and second variable has 3 levels, there are 6 conditions. Researcher randomly allotted 30 subjects for all 6 conditions.

Sample:

The sample is consisted of one eighty male/female students of college students in sagar with age range 18-22 years old. Subjects were recruited through random sampling.

Material:

Mental health battery developed by Arun Kumar Singh & Alpana Sen Gupta is well known as mental health was found most suitable to meet the objectives of present work. Social Support and Socioeconomic status was also collected by a self-made questionnaire.

Procedure:

One Eighty subjects are drawn from various college students of sagar, through random sampling and they are assigned into 6 sub-group. After that consent of the subjects, has been sought. Mental Health Battery by Singh et.al, has been administered to all 180 subjects for data collection. The collection of data planned systematically.

RESULT

Analysis of variance of test scores indicate that the main effect of social support (high social support= 87.18/low social support= 78.12) was significant $F(1,174) 11.06 P<.01$. (Table 1, 2)The main effect of Socio-economic status (high SES=93.38/Middle SES=82.68/Lowe SES= 71.89) was significant $F(2,174) 20.70 P<.01$. (Table 1, 2)

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Table 1: Showing Mean &SDs of Mental Health scores

Social Support	Socio-economics status			Total
	High SES	Middle SES	Low SES	
High social Support	97.06 (4.81)	88.26 (4.87)	76.23 (3.82)	87.81
Low social Support	89.7 (3.95)	77.1 (3.89)	67.56 (4.23)	78.12
Total	93.38	82.68	71.89	

Table 2: Showing 2x3 Analysis of Variance of Total Mental Health Test scores

Source of Variation	Sum of square	Df	Ms	F-Ratio
Social support (A)	3699.20	1	3699.20	11.06**
Socio-economic status (B)	13846.07	2	6923.03	20.70**
AB (Social support X SES)	111.90	2	55.95	.016
Within group (Error)	58187.81	174	334.40	
Total	175844.35	179		

*Significant at 0.05 Level, ** Significant at 0.01 Level

DISCUSSION

The data is analysed in the form of Mean, Combined Mean, Standard Deviation and ANOVA are computed separately. From the above result, it is clear that there is significant difference between mental health of high social support & socioeconomic status and low social support & socioeconomic status of college students. The present study is an exploratory one and it reveals several important facts which may be beneficial to college students and to the society.

In total mental health scores of high social support students are found better than low social support. Social support is the physical and emotional comfort given to us by our family, friends, co-workers and others. There is good evidence that social support plays an important role in mental health or substance use problems. For example, people who are clinically depressed report lower levels of social support than people who are not currently depressed.

In total mental health scores of high socio-economic status students are found better than low socio-economic status. Mental health, health status and socioeconomic status are important determinants of an individual's wellbeing. Lower socioeconomic status is associated with decreased social network size and lower social integration (House et al., 1988; Thoits, 1995).

Good mental health can enhance one's life, while poor mental health can prevent someone from living a normal life. The consequences of these problems are likely to be significant and lasting, as mental disorders in early adulthood are associated with alcohol and substance abuse (Angst, 1996; Weitzman, 2004), academic success (Kessler, Foster, Saunders, & Stang, 1995), and future employment and relationships (Ettner, Frank, & Kessler, 1997; Kessler, Walters, & Forthofer,

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1998). Also without emotional support, mental health is at risk. Mental health of a person depends on Social support such as family, friends, relatives and socioeconomic status.

Nevertheless, it should be acknowledged that the result of this study are based on a limited sample of college students of sagar. It may useful to conduct study on larger sample of different areas of India for future research studies.

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Conflict of Interests

The author declared no conflict of interests.

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